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Aldrich, E. C.

1937-1938

General Index
(for specific localities see each page)

San Mateo Co. and Marin Co., Calif.

Catalog: Specimen Nos. 259-296

General Comments

Photographic record Nos. 37-4 to 37-8

Section 1
March 20-21, 1937

} 18 pp.

Providence Mts., San Bernardino Co., Calif.

May 13 to June 2, 1938

Catalog of specimens: Nos. 450-461

Photographic record Nos. 38-63 to 38-300

General Comments

Species Accounts (check-list order)

Section 2

} 98 pp.

Section 1

Oil-soaked water birds

May 1937

Aldrich, E. C.

San Mateo Co., Marin Co., Calif.

March 20, 21, 1937

P. C. Aldrich
1937

Catalog

Half Moon Bay, San Mateo Co., Calif.
March 20, 1937

- ✓ 259♂ *Melanitta deglandi*
- 260 *Melanitta deglandi* (discarded)
- ✓ 261♂ *Aechmophorus occidentalis*
- ✓ 262♂ *Cephus columba*
- ✓ 263♀ *Larus occidentalis*
- ✓ 264♀ *Aechmophorus occidentalis*
- ✓ 265♀ *Melanitta*
- ✓ 266♀ *Gavia stellata*
- ✓ 267♂ *Uria troille californica*
- ✓ 268♀ *Gavia stellata*
- ✓ 269♂ *Uria troille californica*
- ✓ 270♀ *Aechmophorus occidentalis*
- 271 Murrelet (species?) -- (discarded)

J. C. Aldrich
1937

- 272♂ *Aechmophorus occidentalis*
- 273♀ *Larus glaucescens*
- 274♀ *Synthliboramphus antiquus*
- 275♂ *Uria troille californica*
- 276♂ *Uria troille californica*
- 277♂ *Uria troille californica*

Montara Beach, San Mateo Co., Calif.
March 20, 1937

- 278 *Ptychoramphus aleuticus* -- (Discarded)
- 279♀ *Synthliboramphus antiquus*
280♂ *Synthliboramphus antiquus*
- 281♂ *Gavia stellata*
- 282♂ *Phalacrocorax penicillatus*

E. C. Aldrich
1937

Salada Beach, San Mateo Co., Calif.
March 20, 1937

- ✓ 283 *Rissa tridactyla pollicaris*
- ✓ 284 ♂ *Gavia stellata*
- 285 Murrelet (species?) -- (discarded)
- 286 Murrelet (species?) -- (discarded)

Bolinas Bay, Marin Co., Calif.
March 21, 1937

- ✓ 287 ♀ *Aechmophorus occidentalis*
- ✓ 288 ♀ *Phalacrocorax penicillatus*
- ✓ 289 ♀ *Colymbus auritus*
- 290 Murrelet (species?) --- (discarded)
- ✓ 291 ♀ *Melanitta perspicillata*^a~~x~~
- 292 Murrelet (species?) -- (discarded)
- ✓ 293 ♂ *Brachyramphus marmoratus*

C. Aldrich
1937

- 294 *Gavia arctica pacifica* - (discarded)
- ✓2958 *Gavia stellata*
- ✓2963 *Melanitta perspicillata*ⁿ~~x~~

Acc. 5206 MVZ Dept. Cat. Nos. 70611 - 70639

E.C. Aldrich
1937.

(4)

~ General Comment ~

U.C. Campus to Half Moon Bay to Sausalito
March 20

At 6:20 this morning Howard Twining, Frank Richardson and myself left in M.V.Z. truck #112 with a unique purpose in mind. Due to the sinking of an oil tanker in the Golden Gate a week or so ago many water birds have suffered because of the oil pollution in the water. From reports, a good deal of damage has been done both north and south of the gate. Deciding to make Half Moon Bay our farthest point south, we headed directly there first and worked our way back north to San Francisco & thence to Sausalito for the night. Much of the time on the way back was spent combing the beaches for all species of oil soaked ^{birds} which are mainly to be used for skeletal material. Oil was present on all the beaches examined in somewhat varying quantities for

E. P. Durick
1937.

②

which I don't know the reason,
unless it is due to the steepness
of the shore itself. Since the
oil floats on the water it
would naturally be deposited
more easily on flat surfaces
where the water can seep ^{slowly} into
the sand leaving the oil as
residue. On a steep shore
the waves recede so fast that
it takes the oil with it
back into the surf. In
some places the sand of the entire
beach was colored a dense
iridescent black to a depth
of 8". For the most part, however,
oil on the beaches was present
in blobs averaging perhaps
2" in diameter + $\frac{1}{2}$ " thick. These
blobs were very heavy and of
nearly the consistency of grease;
their volatile parts gone, leaving
in almost asphalt base. On the
shore the blobs were concentrated
in the masses of driftwood.
In these masses were where
we looked for the birds in particular.
The oil seems to hold much debris

E. C. Alvick
1937.

(3)

together that certainly would not
be in tact. Finding small birds
such as Murrelets in these masses
was extremely difficult & probably
some were overlooked. Birds for
specimens were obtained in
several ways. The way most of
them were obtained was to pick
them up dead on the sandy shore.
Others were alive and were chased
down & obtained by that method.
The reaction of these live birds
to the oil certainly presented a
pathetic sight. Some were
so weak they could hardly
raise their head, yet their last
energy was being spent in
a futile attempt to preen
out their feathers. Many lay
trembling & shivering because
the oil had separated the
feathers leaving the cold wind
to reach their bare skins. Some
no doubt were in the last
stages of starvation due to
their inability to obtain food.
Many birds such as California
Murres, Gulls, and Western Grebes

E.C. Udick
1937.

(4)

would walk as far back
on the shore line ^{as far as,} as they
could not occupy crevices
& niches where they could
keep still & thus be unnoticed
to passerby. In these cases
masts were too oil soaked
to stay afloat on the water and
apparently took this avenue of
escape when a dog or people
passed by. In approaching
these concealed nests, however,
they would make a run for
the pounding surf and usually
would be returned ^{quickly} as we saw
the pounding of the first wave.
Tide Murres when approached
gave a coarse squawk, Loons
quacked like Mallards, and
Western Grebes gave their regular
grating call which sounded
more broken & distressed than
usual. All birds were beligerent
and care had to be taken not
to get too many gashes on our
hands. All methods of killing
were tried that would still
let them be valuable as skeletons,

1937

but none were efficient. Finally, we resorted to carbon monoxide from the car; this killed them within a minute. Some of the birds were seen in lagoons preening busily and ducking themselves in a futile attempt to wash it off. Naturally the birds affected most would be those requiring water in which to swim all the time, such as Loons, Mergansers, Murres, Grebes and Loons. Those birds that were in the water part of the time or on shore near the water were affected in various ways and reflected the habits of the birds. Snowy plovers that inhabit the upper shoreline away from the waters edge had very little signs of oil on them except on the feet due to their running across oil blobs at times. Sand-lings, however, that are constantly at the oscillating waters edge, looked strangely like Red-backed Sandpipers in breeding

E.C. Aldrich

1937

(6.)

Plumage because their feathers
were coal black from oil.
All were marked exactly the
same showing how nearly
like all of them are and their
similar abilities to dodge
waves higher than about 2"; no
dead sandlings were found
at all. When a flock of
sandlings that weren't feeding
were approached they all
presented the same picture with
their heads down, busily
working on their breast-plates.
Gulls were affected in various
ways: some were completely oiled
and were either on the drift
line or at the base of ships.
Some were only slightly oiled
as on the breast like the sandlings.
This, as above, reflected the
the habits of this bird. I saw
that few if any walking along the
shore by the waves were probably
the ones that were oiled on the bottom
only. Those that alighted in or
beyond the surf had oil on the
wings at least, if not all over.

E.C. Aldrich

1937

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A frequent sight was to see a ~~white~~ white-headed adult snow-bus-winged or Western gull with a black spot around the eye similar to the spot behind the Bonaparte's eye in winter plumage. The size of the spot wasn't constant however and sometimes was almost a complete ring. Watching many of the gulls scratched their heads & necks with their feet gave us a clue as to the cause. Their feet had been "coldset" with blobs of grease. Some of the birds on the beach were positively unidentifiable because they were so heavily oiled and greased that the outline and size of the bill couldn't be noted. Those birds that weren't so heavily oiled & scratched & scratched at the base of the beaks were frequently found dead in their natural positions. I recall seeing an adult Murre in breeding plumage (some were in winter

E.C. Aldrich
1937

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plumage yet) sitting upright at the base of a cliff in a niche. Expecting it to still be alive & approached slowly, & picked it up & found rigor mortis had already come; the Murre had died in sitting position or leaning back on its tail in penguin fashion. Speaking to the natives (3 sources), they said the oil had arrived lay before yesterday. In a whole the oil, seems to ^{float} ~~stick~~ pretty close to the shore at all times which is probably due to prevailing westerly and wave action. Thus only the birds that feed in close are affected - this may or may not be true.

The following is a summary of how the various ways I think the birds are killed by the oil, directly or indirectly:

(1) Covered completely with oil while in the sea allowing them to be water-logged and eventually drown (Later thrown up by surf)

E. C. Aldrich
1937

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(2.) Swallowing some oil while out at sea thus poisoning themselves (eventually tossed up on shore).

(3.) Getting the nostrils clogged with grease and thus suffocating. (tossed up on shore)

(4.) becoming partially blind and going to the dry beach to preen. Here they die of starvation, hastened by over exertion of preening or by exposure to cold wind on their separated & naked feathers.

The weather for today was dull sunny, or partly cloudy with occasional cold winds.

The following are censuses from the main areas where collecting was done:

Half Moon Bay

We covered about $\frac{3}{4}$ ths of the entire bay which amounted to about 2½ miles.

| | | |
|----------------------|-------|----|
| California Murre | ----- | 59 |
| Cormorant (Species?) | ----- | 1 |
| Western Grebe | ----- | 15 |
| Glaucous-winged Gull | ----- | 1 |

E.C. Aldrich
1937

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| | |
|--|---|
| Unidentifiable | 1 |
| Gull (Species?) | 1 |
| Murrelet (Species?) | 3 |
| Scoter (Species?) | 3 |
| Red-throated Loon | 3 |
| White-winged Scoter | 8 |
| Western Gull | 1 |
| Surf Scoter | 2 |
| Calif. Gull | 1 |
| Pigeon Guillemot | 1 |
| A total of 13 species and 100 individuals. | |

Montara Beach

We covered the entire beach,
a distance of about $\frac{3}{4}$ mile.

| | |
|---------------------|----|
| Calif. Murre | 41 |
| White-winged Scoter | 4 |
| Gull (species?) | 2 |
| Brandt Cormorant(?) | 1 |
| Western Grebe | 3 |
| Scoter (species?) | 2 |
| Pacific Loon(?) | 1 |
| Surf Scoter | 3 |
| Cassin Auklet(?) | 1 |
| Marbled Murrelet | 2 |
| Unidentifiable | 1 |

A total of 10 species and 61
individuals.

E. C. Aldrich
1937

(11)

Salada Beach

We covered about 1 1/2 miles here,
but not as much was seen
as other beaches because it was
sleeper.

| | | |
|------------------------------|-------|----|
| Scoter (species?) | ----- | 1 |
| Western Grebe | ----- | 10 |
| Red-throated Loon | ----- | 3 |
| Calif. Murre | ----- | 10 |
| Merganser (species?) | ----- | 1 |
| Murrelet (species?) | ----- | 2 |
| White-winged Scoter | ----- | 3 |
| Baird Cormorant | ----- | 1 |
| Teal (Species?) | ----- | 1 |
| Surf Scoter | ----- | 1 |
| Gull (Species?) | ----- | 2 |
| Pacific Kittiwake (immature) | ----- | 1 |

A total of 12 species and 36
individuals

E. C. Aldrich
1937

(12)

Sausalito to Bolinas Bay, Marine Co., Cal.
March 21, 1937

Leaving for an early start at 5:30 A.M. was of no avail for us because we spent until 10:30 getting the truck out of the mud at Stinson Beach. Here in the midst of the cold pouring rain early this morning a ♂ Allen Hummingbird was seen doing its pendulum arcs and 2 power dives over a leafless tree; no sign of any ♀ was present. From there we went around the end of the bay to the town of Bolinas and there inquired at the Coast Guard Station concerning the oil situation. The Captain said that the oil arrived there the day after the wreck and affected all the birds considerably. This is conceivable because I always have regarded Bolinas Bay as a haven for water fowl. He said that yesterday some of the men went along the beach and killed about 300 birds. They did this because the people there had sent in so

E.C. Allen

1937

(13)

many complaints about the cries of the beached live birds due to hunger. The noise created by these dying birds was stated to be "almost dinning". Their method of killing was with a .22 rifle or shot. Upon asking if he thought these birds would still be present for our purposes, he said probably not because of an unusually high tide the night before. We found it much the same as he said.

Many were buried or washed out to sea. Analyzing his descriptions it seems he killed a good many scoters, gulls, and some mergansers. He said that the healthy gulls would harass the sick ducks.

From there, ~~first~~ we went up the coast from Belinas. We only went a short ways because the high tide came completely up to the banks, not giving any chance for birds to be beached. Probably here many of the birds were drowned when the rising tide came in washing away those live birds that sought

E. C. Aldrich
1937

64.

shelter on the shore. In walking several hundred yards we found only 2 Murres, one Gull (sp.?) and 3 unidentifiable. From there we returned to Shinson beach and combed about $\frac{3}{4}$ th of the same spit that crossed the bay. Here we found Western Grebes to be the most abundant among the dead as compared to Murres being most abundant elsewhere. I think this can be explained in that grebes like a widgeon or Boobies and are frequently seen swimming to and fro from the Bay to the ocean. It is interesting to note how different kinds of birds react to being in the process of being thrown up on the beach. Western Grebes and Scaup when in the pounding surf will attempt to dive through the breakers when they come, even if they are ^(birds) nearly exhausted and very weak. Murres however normally don't spend their time in or near the ~~above~~ surf as the above two birds do.

E. C. Aldrich

1937

(15.)

And when caught in the waves it is obvious that they don't know how to escape them by diving, but are rolled over and over and beached immediately. I wonder if this holds true on their breeding ground. It probably does, as I expect when the Murres fly to their nests they take off beyond the breaker line. Taking into consideration the normal water displacement of the different species it is possible to compute on sight about how much a bird is riding in the water when yet alive. Many seabirds were seen to be barely floating with just their heads & the tips of their tails protruding above the surface of the water. Some birds on the Buinas spit were found dead in the tops of the grass-covered sand dunes where they sought seclusion. This niche on the spit probably supplied and replaced the niche sought for

E.C. Aldrich

1937

(16)

at the bases of cliffs as found elsewhere yesterday.

Both yesterday and today I noted the reaction of healthy gulls to a captured and sick one. When we would chase down a maimed gull others would fly around low over head giving raucous calls. Frequently another bird (gull) was seen following along with an sick gull.

Weather for today was extremely wet. It poured the entire day and was accompanied by winds from the west.

The following is a list of dead or dying birds from Bolinas Spit.

Bolinas Spit

| | |
|----------------------|----|
| Western Grebe | 31 |
| Red-throated Loon | 7 |
| Ruddy Duck | 2 |
| Calif. Murre | 11 |
| Surf Scoter | 4 |
| Pacific Loon | 1 |
| Eared Grebe | 1 |
| Murrelet (species?) | 1 |
| Glaucous-winged Gull | 1 |

E.C. Aldrich

1937

(17)

Loon (Species ?) ----- 3
Cormorant (species ?) ----- 1
Scoter (species ?) ----- 2
Marbled Murrelet ----- 2
Surf Scoter ----- 1
Unidentifiable ----- 1

A total of possibly 15 species and
72 individuals.

Photographic Record

March 20, 1937

#37-4 - Half Moon Bay, San Mateo Co.
Adult oil soaked Murre.
in breeding plumage, sitting
on sand. 50th - f. 16. Super
Kienichrome

#37-5 - Half Moon Bay, San Mateo Co..
Western Grebe (oil soaked)
sitting on sand being held
by Frank Richardson
50th - f 11

#37-50 - Same as above, except
not being held by Frank.
Is probably moved.

R. C. Aldrich
1937

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#37-6. - Near Half Moon Bay.

Left to right Chas. Aldrich,
Frank Richardson, Thomas
Twining eating lunch in
front of M.V.Z. Dodge Travel
50th - 711.

#37-7 - Salada Beach, San Mateo Co., Cal.
Oil soaked milk - Surf - Seals
Surf & on beach - Moved

#37-8 - Same as #7 - not moved

Section 2

Top 20'

Aldrich, E. C.
1938

Providence Mts., San Bernardino Co., Calif.
May 13 - June 2

E. Aldrich
1938

Catalogue

10 mi. ENE Baker, San Bernardino, Calif.

May 12, 1938

- 450 *Cnemidophorus*
451 *Cnemidophorus*
452 *Dipsosaurus*

2 mi. N.W.E. Cima, 4100 ft., San Bernardino Co.
Calif.

May 13, 1938

- 453 ♀ *Tyrannus verticalis*
454 ♂ *Myiarchus cinerascens*
455 *Crotaphytus wislizenii*
^

May 14, 1938

- 456 ♀ *Lanius*
457 *Crotalus*

May 16, 1938

- 458 fledgling ~~*Oreoscoptes montanus*~~ *Oreoscoptes montanus* (alcoholic)
~~*Oreoscoptes montanus*~~

May 17, 1938

- 459 *Crotalus*

3 mi. SE Cima, 4300 ft., Providence Mts., San
Bernardino Co., Calif.

May 20, 1938

- 460 *Sceloporus magister*
461 *Phrynosoma platyrhinos*

E.C. Aldrich
1938

Photographic Catalog

✓ = discarded

2 mi. NNE Cima, San Bernardino Co., 4100 ft, Calif

May 13, 1938

38-63 - young Jack Rabbits about 1 wk. old
taken from den by Arvey. Close-up of
one individual. Superan; f 22 - $\frac{1}{15th}$.

38-64. Same as #63

38-65 Same as #63 - Superan

38-65_a Same as #65

38-66 Same as #65

38-67 Same as #65

38-68 Same as #65

38-69 Same as #65 - all 5 young of the litter

38-70 Same as #69

✓ 38-71 View looking East - Moon coming up over
N.Y. Mts thru Joshua. f 5.6 - 2 sec.

E. Aldrich
1938

2.

May 14, 1938

- 38-72 Burrow of (or dening place) of the Desert Tortoise, taken 5' away. 3 hrs. ago this morning Johnson found two tortoises here. In foreground may be seen a few scale marks up the legs in the dirt. Isopan; f22-toth.
- 38-73 Habitat Picture - Place where Johnson set trap-line last nite (caught Perognathus, Onychomys, Dipodomys). Tracks in foreground of the desert wash are cows. Much Ephedra & other bushes bordering wash. Birds nearby are Mockingbird, Horned Lark and Desert Sparrow. Isopan; f22-to; K2 Filter.
- 38-74 Close-up (about 3' away) of Rattlesnake 37" long; 7 rattles + button. Taken next to Joshua log in shade. Superpan Press; toth; f22 Color: Diamonds dull, neutral brown; rows of scales bordering diamonds, light cream; on sides between points of diamonds, dull sea-green; Underparts dull cream.
- 38-75 - Same as #74
- 38-76 Same as #74

E. Aldrich
1936

3.

38-77 Same as #74

38-78 Same as #74 - toth - f22

38-79 Same as #78

38-80 Same as #78

38-81. Picture of well formed Joshua about 15' tall; taken looking east in afternoon
Isopan; f22 - 8th

38-82 - Remains of Cattle on edge of opening
Isopan; f22 - toth.

38-83 - Close-up of nest + 3 eggs of Brewer Sparrow
in Ephedra located on top of mound.

Ht. of bush - - - - - 30"

Ht. to rim of nest - - - - - 12"

Inside dia. of nest - - - - - $1\frac{3}{4}$ "

Outside " " " - - - - - $4\frac{1}{4}$ "

Inside depth - - - - - $1\frac{1}{8}$ "

Outside depth - - - - - $2\frac{1}{2}$

Eggs are blue, spotted with brown. Nest
material dry grass, lined finely with cowhair.
Taken $\frac{3}{4}$ view just showing inside.
Isopan; f22 - 3mc.

E. Aldrich
1938

38-84 Same as #83 - more top view

38-85 Same as #83 - Complete side view showing nest attachment.

38-86 Same as #83 - Taken of entire bush about 6' away - f22-1/4 sec; Japan

38-87 Same as #86 - Farther away yet showing where bush is located in relation to the Kariyan. All of the shots of the Brewer Sparrow nest are from the side of the bush that is exposed. Japan; f22 - 6th.

38-88 ~~See~~ Nest probably of Short Sparrow in *Atriplex*(?). Birds were around & seemed quite excited. Found this nest but eggs were completely covered & looked broken down inside; removed the debris & found 4 fresh(?), at least not far incubated, but probably deserted. Eggs, pure white with large air bubble on larger end

Ht. of bush - - - - - 28"

Ht to rim of nest - - - - - 11"

Inside dia " " - - - - - 2"

Outside dia " " - - - - - 5 1/2"

Inside depth - - - - - 2 1/4"

Outside depth - - - - - 4"

E. Aldrich
1938

5,

Nest entirely of dry grass with lining of decayed *Jasna* leaves; no hair as in the preceding Brewer Sparrow's nest located 25 yds. away.

Picture taken 2' away showing eggs
Japan; f 22 - 2 sec.

38-89 - Same as # 88 - 6' away showing opened bush and nest. Japan; f 22 - 1/2 sec.

38-90 - Same as # 88 - Picture of back of bush showing relation to terrain. Nest is in center of left hand bush in foreground. Japan; f 11 - 8th.

38-91 - Top view into interior of 30" high *Ephedra* bush showing a nest of last year or year before. This has been used as a roosting site as there are many droppings on the flattened surface of the nest. Superpan Press; f 22 - 1/2 sec.

May 15, 1938

38-92 Picture of a burrow (probably *Spodomys*) on bare ground covered with gravel of decayed granite. 6" ruler for comparative size. Dia. of opening $2\frac{3}{8} \times 2\frac{1}{4}$ (wider than tall). Tail and foot marks are in front of the fresh hole. To right is an older hole covered with cobwebs. Old

E. Aldrich
1938

6.

Cow dropping near alder hole. Japan;
15th + f 4.5 (forgot to stop down)

38-93. Same as #92 - stopped down to f22 - 15th

38-94. Opuntia basilaris in full bloom. Ht = 9"
Color of flat bases, dull grayish green.
Color of flowers, brilliant deep pink.
Outside dia. of blossoms = $2\frac{3}{4}$ ". Taken
about 3½' away. Japan; f22 - 15th.

38-95 Same as #94 - closer up and lower
down; 2½' away.

38-96 Opuntia ramocissima 25" high with
series of 4 burrows at its base (might
be Ariz^m spermophilus). Cactus has but
a few needles on. Japan; f22 - 8th

38-97 - Group of Jucca baccata from distance
of about 10 yds. - Joshuas in background.
Japan; f22 - 15th.

38-98 - Same as #97 - closer up - I think
the fibres shown are used by Scott Orioles in
building nests.

E. Aldrich
1938

7.

38-99 - Picture of what I think is a badger working. Apparently was digging after a ground squirrel. 6" ruler for comparative size. Japan; f 22-6th.

38-100 - Cactus (^{*Opuntia mayriensis*} ~~sp.?~~) taken at distance of 6'. Dia of clump = 38" x 33". Some of the flowers arn't fully opened. Petals brilliant orange-red. Stigma bright green. Thorns, light buff. Body of each cactus, lt. green. 6" ruler for comparative size. Japan; f 11-50

38-101 Burrow probably of Kit Fox at base of bush. Is 8" wide + 7" high at the opening. Japan; f 16-25th.

✓ 38-102 Nest + 4 ~~h~~ half-grown young of Say Phoebe located 5' high on top of a box nailed to the ^{inside} wall of a deserted shack. Taken about 3' away. 2 sec. - f 11 - Superpan Press.

38-103 - Picture of deserted shack. Nest of Say Phoebe + 4 young just inside door on box 5' high nest is made of string, threads from cloth which lines the rooms of shack, bits of wool. Nest 7" round with cavity of 3" Japan; f 11-50th

E Aldrich
1938

8.

May 16, 1938 Sage

38-104 - Nest site of ~~Sage~~^{Pyndore} Thrasher in
Opuntia ramosissima. Nest contained 2 hrs.
ago 4 young nearly ready to leave the nest.
When returned all had left but one &
it was nearly dead (was a runt & undeveloped)
Isapan; f 16 - 25th.

38-105 - Same nest as #104 - closer up and
cactus opened up to show structure.

Ht. of Cactus 35"

" to rim of nest 15"

Outside dia of nest 10"

Inside dia of nest 5"

Outside depth 10"

Inside depth 3"

Nest is composed mostly of thorny twigs
and lined with a layer of decayed Joshua
leaves (fibers) and some red-brown Cow Hair
Isapan; f 22 - 4th sec.

38-106 Picture Linnets nest + 4 eggs located 8'
up in tip of branch of Joshua tree. Nest
in center of clump in middle of picture
Isapan; f 10 - 25th

E. A. Munch
1938

9.

- 38-107. Habitat picture - Right hand side of right Joshua tree contains a Linnet's nest (previous picture). In center foreground is cactus containing ^{Syntherisma} Sage Thrasher nest. To left of that in foreground is Opuntia basilaris. 2 or 3 Rock (sp?) can be seen in right & center foreground. In background are the Providence Mts. Japan; f 16 - 30th. (also Cnemidophorus habitat)
- 38-108. Same as #107 - Agfa #17 filter, deep colored end. Japan; f 16 - 10th
- 38-109. Same position as #107 & #108 but camera pivoted to left (more east) showing New York Mts in background. In foreground can be seen an open area frequented by Ammospermophilus, Horned Toads, Horned Larks. Tree framing picture on left for 20 minutes contained a ♂ foraging Coctus Woodpecker. Japan; f 16 - 10; Agfa #17 yellow filter, deep end.
- 38-110 - Picture 3' away taken of cactus (sp?) 12" high. Spines are reddish buff & new buds reddish. Superpan Press; f 11 - 250th.

Aldrich
1938

10.

- 38-111 Nesting tree ^{of Swainson Hawk} about 15' up in Joshua. Nest is about 3' wide and 3' deep & contains 2 white eggs well incubated. Taken from shady side of tree where can better be seen the nest supports. Isopan; f16- $\frac{1}{4}$ h; K2 filter.
- 38-112 - Same nesting tree as #111 taken from sunny side (west) and farther distant. Isopan; f11- $\frac{1}{30}$ h; K2 Filter.
- ✓38-113 - Same as #112 - slightly closer with me part way up tree (self timer). Superpan Press; f16- $\frac{1}{60}$ h; Agfa #17 yellow filter, center portion.
- 38-114 - Habitat Study - Yucca mohavensis in center with Joshuas fringing both sides. Woodrat nest at base of nearly all Y. mohavensis. Birds about are Shrike, Desert Sparrow, Mockingbird. Ephedra at bases of Yuccas in abundance. Has and Whip-tailed Lizards also about. Isopan; f22- $\frac{1}{5}$ h; K2 Filter.
- 38-115 - Power line Tower running through Joshua forest. "This would be the only high nesting spot for raptors and it is covered with Hawk guards." Only other possible sites are Joshuas except Mts. far in distance. Isopan; f16- $\frac{1}{5}$; K2 filter. Taken late in afternoon.

E. Aldrich
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May 17, 1938

38-116 Prickly pear type of cactus 40 inches high, buff-green in color. Taken 1 mi S.W. Kessler Springs. Isapan; f 22-15th.

38-117. Female Costa Hummingbird on nest. Same locality as #116. Nest located on dead remains of Joshua blossom 8' up. Nest contains 2 fresh eggs. Bird was exceedingly unwary and would allow to be touched. Superpan Press; f 11-50th.

38-118 Same as #117

38-119 Same as #117

38-120 Same as #117

38-121 Same as #117

38-122 Same as #117

38-123 Same as #117

38-124 Same as #117

38-125 Same as #117

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12.

✓ 38-126 Same as #117 (Fogged!)

38-127 Same as #117 - Taken farther distant at about 3 feet. Isapan; f 5.6 - 25th (broken diaphragm).

38-128 - Same nest as #127 - taken, farther distant to show nesting tree. Nest located on left-hand side 8' high. Isapan; f 5.6 - 80th.

May 19, 1938

38-129 - Habitat Picture - opening in the Soshua forest inhabited chiefly by Horned Larks. Taken from top of truck. Isapan; f 16 - 25; K2 filter.

38-130. View from top of truck showing stock watering place and overflow stream frequented by flocking Mourning Doves, and other birds seen drinking there: Linnets, Kingbirds, Brewer Sparrows. Turkey Vultures frequently seen hovering low over tank. Isapan; f 16 - 25; K2

38-131 View of Cattle amongst Soshuas Superpan Press; f 18 - 80th.

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38-132 Nest + 3 eggs of Desert Sparrow. Thread release accidentally pulled without bird being present.

38-133 Same nest + eggs as #132. Taken higher up showing interior. Nest entirely of dry grass lined with a few feathers and brown cow hair. Nest in Atriplex (?)

Ht. of bush

28"

Ht. to rim of nest

12"

dia. (outside) of nest

4 $\frac{1}{2}$ "

" (inside) " "

1 $\frac{3}{4}$ "

Inside depth

2"

Outside depth

2 $\frac{3}{4}$ "

Superpan Press; f22 - $\frac{1}{4}$ "

38-134 Picture of Camp and Dave Johnson writing letter inside of tent. Superpan; f8 - 50th approx center section.

38-135 Same as #134 - Tent flap down

C.H. Thomas Ranch, 5 mi. S.E. Cima, San Bernardino Co. Calif.

May 20, 1938

38-136 Close-up of ♀ Sparrow Hawk at opened nest site, 55" high in Joshua shrub. Superpan Press; 40 - f11.

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38-137 Same as #136 at side of nest.

38-138 Same as #137

38-139 Same nest as #136 - View of entire nesting stub. Nesting hole is 2nd from the top on right. Isapan; f 10 - 10th; K₂ filter

38-140 Same nest as #136 - Close up of eggs. 4 are of Sparrow Hawk & 3 old ones probably of Flicker. Isapan; f 22 - 2 sec.

38-141 Horned Toad taken on natural habitat sand. Specimen 459 (alcoholic). Isapan; f 22 - 10th.

38-142 Same as #141 - More dorsal View.

Cedar Canyon, 5000 ft., Providence Mts., San Bernardino Co., Calif.

May 20, 1938

✓ 38-143 Nest + 4 eggs of Desert Sparrow in Opuntia parryi (?); Parent bird (sex?) incubating Isapan; f 8 - 25th

38-144 Same nest as #143 - without parent Isapan; f 22 - 1/2 sec.

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38-145 View looking South across Cedar Canyon showing road to Essey running up side Canyon and Cedar Canyon Rd. running up to left. Dry wash at base of hills. Isapan; f 20 - $\frac{1}{2}$; K₂ Filter.

May 21, 1938

38-146 View of Bluff East of Camp. Probable nesting site of Red-tailed Hawk & Prairie Falcon. Birds seen in foreground: Mockingbird, Rock Wren, Brewer Sparrow, ~~and~~ Shrike, and Horned Lark. Isapan; f 16 - 20; K₂

CH. Thomas Ranch, 5 mi. SE Cima, San Bernardino Co., Calif.

May 22, 1938

38-147 Nesting Stule 6 $\frac{1}{2}$ ' high with of Screech Owl. Isapan; f 14 - 50th

38-148 one of the 4 yug. out of nest #147. Eyes are barely open, and beginning yesterday the parent wasn't found in nest during day. Isapan; f 20 - 25th.

38-149 Adult Shrike at nest + 2 yug. + un hatched egg. Yug. are have not feathered as yet. Nest composed of thorny sticks with lining of decayed Joshua needles. Nest 7' high in Joshua Superon area; f 14 - 100

E. A. Mearns
1938

16.

38-150 Same as #149 - Parent has either portion of scorpion or young bird's leg.

38-151 Same nest as #149 - Farther distant showing entire nesting tree. Nest is saddled in 1st branch of Joshua Isopan; f 11 - fork.

38-152 View looking west of Pinnacle framed by Joshua on right. Talus up to Cliff faces occupied by Rock Squirrel. Wood rat droppings found to summit in cracks. About 1 dozen Myotis subulatus frightened out of crack to right of summit and about 30' below top. Up to faces of unbroken rock saw Cnemidophorus and Sceloporus magister. Red-tailed Hawks nest + 3 half-grown young on vertical face on opposite side of pinnacle near (within 15') top. Canyon Wren nesting ^(young) on talus in center of Pinnacle. White-throated Swifts (about 20) seen flying in cracks near top. Other birds seen near base: Linnet, Desert Sparrow, Cliff Swallow, Woodhouse Jay, Costa Hummer, Turkey Vulture, Rock Wren, Scott Oriole, Gambel Quail, Ash-t. Flycatcher. Plants: Barrel Cactus, 3 kinds Cereus, Opuntia basilaris, Joshua; Yucca baccata, Y. mohavensis, Opuntia sp?; Ephedra, Composite Flowers, Composite bushes, 1 Juniper 25' high Isopan; 25 - f 11; K2 filter.

G. Alderson
1938

- 38-153 Taken from same place as #152 (8 mi. SE
Cima) Looking East up Cedar Canyon.
Reddish bluff near camp almost on horizon
in center. Dark spots on higher parts
of hills are junipers. Prickly pear cactus
present. Isopan; f22-4; K2 filter.
- 38-154 Same pinnacle as #152 - Nest of Red-tailed
Hawk + 3 yng. from distance of about 35'. Isopan; f11-50th.
- 38-155 Same as #154 - with telephoto attachment.
Isopan; f22- $\frac{1}{6}$. Crack running down from nest
occupied by White-t. Swifts.
- 38-156 - Crack from which come about 12
Myotis subulatus (caught two) yesterday.
Crack averages about $\frac{1}{2}$ " wide beneath
exfoliating slab of granite. No bats here
today. Isopan; f11-60th.
- 38-157 - 1 mi. E of the Pinnacle above - Nest + 5 eggs
of cactus Wren in Opuntia sp? Isopan; f9-50th.

E. Aldrich
1938

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Cedar Canyon, 5000 ft., Providence Mts., San Bern-
ardino Co., Calif.

May 22, 1938

38-158 Nest with Adult & 4 eggs (same nest
as #143) of Desert Sparrow. Bird on
the eggs. Superpan; f 11 - 25th.

38-159 Same as #158 - Superpan Press; f 22 - 50th

38-160 Same as #159

38-161 Same as #159

38-162 Same as #159

38-163 Same as #159 - Superpan Press; f 14 - 100th
Bird approaching nest.

38-164 Same as #163

✓ 38-165 Same as #163.

✓ 38-166 Picture of me with Cowbird & Cottontail.
Superpan Press; f 16 - 80th.

E. Aldrich
1938

May 23, 1938

38-167 Nest of Cactus Wren + 5 eggs (same nest as #157) taken after an attempt to get bird at nest.

Length of nest - - - - - $11\frac{1}{2}$ "
Horizontal dia. of nest (largest part) - - - $7\frac{1}{2}$ "
Vertical dia. of the largest part - - - - - 6"
Dia. of Opening - - - - - 2"
" outside of entrance (by opening) - - - $5\frac{1}{2}$ "
Ht. of nest above ground - - - - - 37"

Nest made entirely of dry grass lined with very fine grass, few feathers, and fibers of Joshua leaves. Isopar; f 11-30th.

38-168 Mound + clogged entrance of Lepidomys (sp?) in sandy gravel.

Long dia of mound - - - - - 23"
Short " " " - - - - - 14"
Horizontal Dia. of Burrow - - - - - $2\frac{1}{4}$ "
Isopar; f 16-25th.

(Rhinocœelus lecontei).

38-169 - Coral King Snake 25" long Given to me by C.H. Thomas Taken in the basement of his house. Photographed at camp in Cedar Canyon. Black bands spotted with cream-colored scales. Cream-colored bands with deep blood-red-tipped scales. Ventral surface cream with ^{provisional} gray scales. Suprapar press; f 22-26th. Specimen

E. Aldrich
1938

20.

38-170 Same as #169 - Closer up.

38-171 - Sceloporus occidentalis $7\frac{3}{8}$ " long on
Juniper log. Isapan; f 22 - 8th.

38-172 Same as #171 - Standing more erect.

38-173 Adult ♀ lizards atop rock - Caught in
steel trap by D.H. Johnson (trap invisible
behind rock). Isapan; f 11 - 10th.

38-174 Same as #173, Superpan Bros; f 11 - 10th.

May 24, 1938

38-175 View looking SW from Reddish bluff East
of Camp. Shows Cedar Canyon with wash
and road, and shows side canyon running
up on right in distance where is camp. Pinjon
and Juniper on higher slopes. Joshuas on lower
slopes. Isapan; f 11 - 12; A filter to cut
haze. Framed on left by dead Pinjon.

38-176. Same as #175 - Agfa #17 filter deep end.
f 14 - 10th.

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38-177 Gray Vireo's nest + 4 eggs in Artemisia
tridentata

Ht. of nest 29"

Depth of outside of nest $2\frac{3}{8}$ "

Inside depth 2"

Inside width $1\frac{7}{8}$ "

Outside width $2\frac{3}{8}$ "

Materials are: on outside, mostly shredded bark (thin) of Artemisia & other bushes. Inside lined with extremely fine grass + one feather. About 3 spider egg-cases on outside.

Eggs are fresh & appear light pinkish-buff spotted with reddish-brown more about the larger end. Bird unwary & will sit for picture. Superan; f 22 - $\frac{4}{5}$ hrs sec. (in shade)

38-178 - same nest as #177 - Bird on the nest

38-179 - same as #178 - Superan Press 15th - f 16

38-180 Same as #179

38-181 Same as #179

38-182 Same as #179

38-183 Same as #179 - 30th - f 11

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38-184 - same as #183

May 25, 1938

✓ 38-185 Bufo punctatus on salt & pepper (general color gray) granite where this toad was found last night. Measurements: Body & head (to tip of tail) 47-mm. Color: Dorsal spots reddish-orange; dark area around each spot dark-olive. Interspaces (rest of back), mottled light gray-green & grayed yellow-green. Parotid Glands - slightly more yellowish than light gray-green ~~color~~ of back & spotted with the reddish-orange. Iris: ~~reddish~~ ^{finely} gold mottled with dark blood-red. Underparts white with tinge of gray-green. Undersides of feet brownish-salmon. Superpan Press; f22; $\frac{4}{5}$ (overexposed)

✓ 38-186 Same as #185

✓ 38-187 Same as #185

38-188 Same as #185 - Different Toad 50 mm. Superpan Press; f22- $\frac{1}{5}$

38-189 Same as #188

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38-180 same as #188 - f22-2

38-191 Cnemidophorus tesselatus on sand in wash (natural habitat) measurements: 93 mm. from anterior end to anus. 325 = overall length. Colors: ^{Iris, yellowish greenish yellow, narrow orange line bordering pupil} all spots black. Ground color on back = gray brown from head half way to tail, shading to light brown (yellowish). Sides = gray from snout half way back, fading to buff (more pinkish than back). Belly = blue grayish-white with black spots. Top of head = brownish olive. Lower labials = slightly lighter than ground color of belly. Side of head = grading from dorsal color to color of labials. Tail = ^(dorsal) brownish with black spots 3 way out, shading to dark brown (nearly black) to posterior end. Side of tail anteriorly lighter than dorsal color with pinkish tinge. Large scales on front of front legs & feet greenish-gray; top of post feet same as front feet. Mottling of dorsal side of hind legs light brown, dark brown, black.
Superior Press; f22-6, in s.d.g.

✓ 38-192 same as #191

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24.

38-193 Same as #191 - In sunshine f22 - 50th.

38-194 Same as #193 - Closer-up and with tail curled beneath feet.

May 26, 1938

38-195 - Habitat study: side Canyon of Cedar Canyon thru which runs the road forking to Essey. Predominating bushes are Artemisia tridentata; several other large types of bushes, a few ^("Yuccum") Yuccas present; Yucca baccata on slope. Just beyond Joshua in center & slightly to left is nest of Gray Vireo + 4 eggs in Artemisia. Just this side of road on left is large dark-green bush containing nest + 5 eggs of Mockingbird. On extreme right of pictures on other side of road is nest + 4 eggs of Least Sparrow in Opuntia sp?.. Other birds present in pictured area are Ash-throated Flycatcher Scott Oriol (passing thru) and Cost Hummer. Several days ago shot Cottontail behind center Joshua. This A.M. in foreground Rodgers & I found very young rattlesnake swallowing Perognathus. Ammodramophilus burrows abundant. Whip-tailed Lizards & Otas present Soopan; f11 - 25; K2 filter.

Aldrich
1938

25.

38-196 Nest + 4 fresh eggs of Gray Vireo (same as #177)
Isopan; f 22-17 sec.

38-197 Same as #196 - farther distant. f 22 - loc.

38-198 Same as #197 - bird on nest in sun.
Isopan; f 10 - 25.

✓ 38-199 Same as #198 - Isopan; f 16 - 15th. (Discarded)

38-200 Habitat picture: Bottom of Cedar Canyon
in wash taken from Yucca cactus hillside.
Trees in wash are Desert Willow just
leafing out. Chrysothamnus and other green
bushes in wash. Pinyon & Juniper on opposite
side hill. Birds seen in bottom of wash:
Many mourning doves resting on shady
ground beneath trees, shot 1 of two Cedar
Waxwings perched atop willows, ♂ Black-headed
Grackle singing atop willows, Linnets,
♂ Arizona Hooded Oriole seen here twice,
Cactus Woodpecker foraging on larger limbs,
 Gambel Quail in bushes around willows.
Isopan; f 16 - 25th.


E. Alarick
1938

26.

38-201 Habitat Study: Dry, sandy Wash at bottom of side canyon running into Cedar Canyon. On extreme left is Joshua + Juniper. Chrysothamnus in bottom of wash. Wash runs into same grove of Desert Willow as #200. Many Coyote and Cattle tracks in sand. Probably habitat for Pepeidomyces. Picolated Warbler observed in Desert Willow, & Whip-tailed Lizards common. Japan; f 20- $\frac{1}{2}$; K2 filter; put slide in wrongly.

✓ 38-202 Same as #201 - put slide in correctly.

38-203 Nesting site of Gray Vireo in Pinon (one on right) on rocky side-hill 30 yds. from dry wash of #201. Japan; f 16- $\frac{1}{5}$; K2.

38-204 Same nest as #203 Close-up showing attachment. Nest as yet incomplete and saddled.  Made of shredded grass fibers, shredded Juniper bark and portions of spider Egg cases. Spider webs used for binding

| | | |
|---------------|-------|-------------------|
| Ht of tree | ----- | 7 $\frac{1}{2}$ ' |
| " of nest | ----- | 5' |
| Outside depth | ----- | 3" |
| Inside " | ----- | 2 $\frac{1}{2}$ " |
| Outside width | ----- | 2 $\frac{3}{4}$ " |
| Inside width | ----- | 2 $\frac{1}{4}$ " |

Isopan; f22-1.

Ht. Coactus site

Dia. supporting branch

Inside dia. of nest.

Inside depth of nest

Nest made of very finely shredded light gray plant fibers, with fuzz from composite stems or leaves as a lining + ³/₁ feathers about 1" long. First material laid down is ³/₈" layer of buff pappus of composite. All bound together with spider webs. Near branch above nest 4". Japan; 25 f11. General appearance of nest grayish.

38-206 Same as #205 - f 5.6 - $\frac{1}{80}th$

38-207 Same as #205 - f 22 - $\frac{1}{4}th$ (moved?)

✓ 38-208 Same as #205 - f 5.6 - $\frac{1}{80}th$.

38-209 Same as #205 - Superpan press; f 2 - f 16; shade.

38-210 Same as #209 - f 11 - $\frac{1}{100}th$.

38-211 Same as #209 - f 11 - $\frac{1}{80}th$

38-212 Same as #209 - Picture of bird with unclosed wings just alighting on nest. Superpan Press; f 8 - $\frac{1}{250}th$.

38-213 Same as #212

38-214 Same as #212

38-214a Same as #212 - farther away

38-215 Same as #214.

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May 27, 1938

Government Holes, San Bernardino Co., Calif.

- 38-216 Cornice remains of rock house at Government Holes in about 1852. Isopan; f 22 - top.
- 38-217 - All the new buildings (except a barn) and ruins of Government Holes. Is now public quarters for cattlemen. Isopan; f 16 - 25th.
- 38-218 - Old (and probably original) stockade made of Juniper trunks and banded with pipe which is probably more recent. Isopan; f 16 - 20.
- 38-219 - View looking South showing typical Great Basin plants: ~~Quercus~~ ^{*Bursera*} ~~glauca~~ ^{*glauca*} + *Artemisia tridentata*. One of the typical granitic outcrops near foreground. Characteristic Juniper-covered Hillside on left background. Birds characteristic of foreground: Desert Sparrow, Western Kingbird, Ash-throated Flycatcher, Western Gnatcatcher, Morning Dove, and oddly enough I shot a Cassin's Thrasher here. Many Cottontails & Jackrabbits. Utas & *Cnemidophorus* also present. Isopan; f 16 - 20.
- 38-220 View looking North from same place as # 219 showing close-up of *Yucca baccata* *Pennisetum* + *Artemisia*. Reddish butte near camp in background. Isopan; f 22 - top.

Rock Springs, San Bernardino Co., Calif.

- 38-221. View looking up wash at the original Rock Springs used by army; site of the last Mormon Mine owned by Bert G. Smith, address Lima, Calif. Rocks on left bear inscriptions: "Stuart, 4th Infantry, May 16, [1857]"; H B Jr. '75. Springs now flowing maximally at 10 gallons per minute & is habitat for Bufo punctatus (tadpoles seen ^{coll.}, adult heard) and probably Hyla arenicolor (tadpoles seen, collected) Japan; f/16-30m.

Portion of old

- 38-222. Rock wall constructed about natural fortress of Rock Springs to hold in stock of the army stationed there. Japan; f/16-20.

- 38-223. Pool in granite rock of Rock Springs inhabited by Bufo punctatus and probably Hyla arenicolor (see #221). Small black tadpoles are probably those of the toad & the larger, more grayish, Hyla. Japan.

Near B.M. 5167, about 3 mi E Camp in Cedar Canyon, San Bernardino Co., Calif.

- 38-224 View looking S.E. framed by juniper on right and showing Table Mt. in center background. Birds seen in ^{Fern's} type of ~~the~~ foreground, Lead-colored Bush-Tit, Shrike, Mockingbird, Horned Lark, Ash-throated

E. Aldrich
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31.

Flycatcher. Isopan; K2; f/16 - $\frac{1}{10th}$

Cedar Canyon, 5000 ft., Providence Mts., San Bernardino Co., Calif. (Rodery coll. #1068),

38-225. Crotaphytus collaris, young on granite rock in wash near where taken. Snout to anus = 66 mm. Tail (incomplete) 83 mm. Colors: Collar bars pure black. From collar to base of tail marked dorsally with alternate transverse bands; ~~of~~ broad and narrow ones. Broad bands ~~bands~~ grayish olive flecked with white splashes arranged in circles. Narrow bands brownish-orange, deeper medially. Belly pale grayish green. Top of head yellow-brown; sides more yellowish + minutely speckled with orange. Tail = ground color tan dorsally fading to color of belly ~~only~~ ventrally. Spots, brown. Front legs, yellowish. Hind legs grayer, spots brown. Isopan; f22 - $\frac{1}{2} + h$.

38-226 Same as #225 better pose.

38-227 Uta stansburiana in natural habitat in wash. Snout to anus 47 mm. Tail 86 mm. Top of head, brown. Ground color of back and sides orange. Spots on back ^(belly + head) turquoise-blue; spots on sides, yellow. Belly, pale gray. Spot on side shiny black. Tail - proximal $\frac{2}{3}$

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32.

same as back, but more blue + less bronze (paler). Distal 3rd, dull grayish-brown. Ventral side of tail, pale gray. Ground color on anterior legs brown proximally fading to gray on feet. Spots of yellow on humerus. Ground color of hind leg same; scattered spots of blue on leg. Japan; f22-15th.

38-228 Xantusia vigilis on rotten log of Soshua in wash. Snout to anus = 39. Tail = 52. Colors: Iris, brown. Top of head, gray. Rostral region, brown. 2 dorsal-lateral lines (dotted down back and complete on head), yellow. Vertical area yellow-green. Sides, gray. Top of tail faintly greenish-yellow. Sides of tail same color but paler; ventral more pale. All spots gray. Belly gray, slightly lighter than side. Legs gray with slight tinge of yellow. Superan Press; f22-6th.

✓ 38-229. Same as #228 - Japan; f22-6th. (Discarded!)

38-230 Hypsigena ~~ochrorhynchus~~ ^{ochrorhynchus} taken on damp sand in dry wash. Snout to anus = 239. Tail length = 39. Colors: Iris, light buff with vertical black pupil. Ground color of back and sides, light tan fading to ^{black} white ventrally. Spots light olive darker on head. Japan; f22-1 sec; shade.

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38-231 Same as # 230 probably moved

38-232 Same as #230 - not moved.

May 28, 1938

38-233 Young Screech Owl (one of litter of six) taken last night from nesting hole in Pinon. ♀ 11-25.

38-234 Same as # 233

38-235 Same as # 233.

Midhills, 2 mi. N. Cedar Canyon, 5500 ft., Near Providence Mills,
San Bernardino Co., Calif.

38-236. Nest + 3 eggs of Black-chinned Sparrow in Artemisia tridentata. Nest constructed of mostly of fibers of Yucca baccata + lined with brown + white cane hair. Nest wholly concealed within bush, which is one of many in ^{sandy} rocky wash.

Ht. of bush 44"

Ht. of nest 26"

Outside dia. of nest 4"

Inside " " 1 7/8"

Outside depth 4"

Inside " 1 7/8"

nest + eggs collected

Isopan; ♀ 11-30; pulled string when thought she was on.

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38-237 Same as #236 - higher up f22 - 1/8th.

38-238 Nest site of Black-chinned Sparrow (same as #236). Juniper in wash on right and Pinjones on left. Nest in Artemisia near Juniper. Rocks on left: saw A. King (ad.) and wood rat. Brewer Sparrow nest + 4 eggs 20 yds. down wash in same habitat as Black-chinned. Soapan; f16 - 1/5th, may move corner.

38-239 - Same as #238 - Camera not moved.

38-240 Nest + 4 eggs of Brewer Sparrow with parent incubating. Nest in Artemisia tridentata 20 yds from #238. Nest almost entirely of grass lined with rootlets.

Ht. bush

37

" nest

27

Outside dia

3 1/2

Inside "

1 3/4

Outside depth

1 3/4

Inside depth

1 1/4

Eggs 4, blue spotted with brown. Soapan; f11 - 1/5

✓ 38-241 Same as #240

38-242 Same as #240

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38-243 Same as #240 - Superpan Press; f 22 - 401d

38-244 Same as #243

✓ 38-245 Same as #243. (Discarded!)

Mid Hills, 3 mi. Cedar Canyon, 6000 ft., Providence
Range, San Bernardino Co., Calif.

38-246 Habitat Study: Mixed Artemisia & Purshia
in foreground up to rocks is inhabited by
about 6 pr. Black-chinned Sparrows. ^(coll.) 2 Desert
Sparrows seen. 2 Rock Wrens on rocks in foreground
as well as on cliffs. Lead-colored Bush-Tits ^(coll.)
in brush & Pinon & Junipers of Cliffs and
on slope. One Rock Squirrel seen on cliffs.
Scott orioles (pr.) seen atop small Junipers
on slope. Heard Western Gnatcatcher & later
saw him atop small Juniper on slope.
Turkey Vultures overhead. Isopan; f 16 - 50.
Also one Spotted Towhee seen.

Cedar Canyon, 5000 ft., Providence Mts., San Bernardino
Co., Calif.

38-247 Lepus arizonae: plucked ^{the} hair to show
new pelage coming in; contains 2 embryos.
Top view showing new hair coming in as dark
spots. Isopan; f 22 - 3 seconds.

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✓ 38-248. Same as #247 - Ventral view showing mammary glands. f22-4 sec.

✓ 38-249 - Same as #247 - Side View. Length from posterior end (not including tail) to farthest anterior part shown = $1\frac{1}{2}$ ". f22-5 sec.

May 29, 1938

38-250 ♂ Sceloporus magister on granite rock in wash near camp. Snout to anus = 112 mm. anus to tip of tail = 112. Colors: Iris, reddish-brown. Line scales ^{above} ~~around~~ eye, yellow including 1st ^{large} 3 scales behind. Side of head + labials, back ^{black} to collar, gray, lighter beneath eye and in loreal region. Top of head mottled gray and yellow-brown. Rostrum, light brown. Gular region pale blue, deepening posteriorly. General ground color of back neutral gray. Keel and scale edges brown, especially posteriorly. Faint and indefinite stripes of faint yellow (row) running down neck. About 18 scales in middle of back, mottled with blue. Scales of side mottled with black and neutral gray. Irregular vertical stripes and other scattered scales bright lemon-yellow. Yellow scales red at base, especially anteriorly. Sides of belly turquoise-blue. Ventral

(area on chest and anterior to vent neutral gray).
Part of belly, indigo. Tail brownish-gray
dorsally, lighter ventrally. Legs and feet
gray. Japan; f22 - 20th.

38-251 Same as #250. In shade f22 - $\frac{4}{5}$ th.

38-252. ♀ Sceloporus magister in same place as
#250. Snout to anus = 99 mm. Anus to tip of
tail = 123. Colors: iris, gold. Side of head
grayish bas. to black collar. Darker gray
markings on scales of cheek. Subocular
and loreal scales white. Labials pale gray
throat, ^(Chin) lighter with a tinge of rose. Top of head
yellowish-brown. Frontal and
rostral regions, gray. Small scales above
and posterior to eye, orange. Back of neck
brownish-gray. Trace of ^{yellow} scale on vertebral
scales, and light orange on bases and
kells of few scales just above color.
Back crossed by 4 bars of ^{brownish} black. 4 spots
slightly darker over pelvic region; one lighter
posterior to these on base of tail. Sides, ground
color light gray with wash of black anterior
to hind legs. 3 irregular dorso-ventral lines
of light lemon-yellow scales. Large area of same
color scales posterior to front leg. All yellow
scales have orange bases and some with orange
tips. Sides of belly pale yellowish-green.

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Center of belly white bordered by gray.
(Area on chest and anterior to vent neutral ~~gray~~ white)
Tail dorsally colored with 14 ~~tan~~ tan
transverse bands alternating with 13
lemon-yellow bands (bands less distinct &
duller toward tip). Ventral surface of
tail cream. Anterior legs & feet gray,
claws dark brown. Posterior legs slightly
more brownish, feet lighter, claws dark
brown. Japan; f22 - 20th.

38-253 Same as #252 - Shade f22 - $\frac{4}{5}$ th.

38-254 Cnemidophorus - same lizard as #191
full length in sun on sandy wash. Japan;
f22 - $\frac{1}{15}$ th.

38-255 Same as #255

38-256 Same as #255 - In shade; f22 - $\frac{1}{15}$ th

38-257 Same as #256

38-258 Same as #254 - Tail curled around feet
f22 - $\frac{1}{15}$ th.

38-259 Pituophis (Sophis Snake) ^(P.C. deserticola) young photographed on damp sand of wash. Snout to vent = 465. Tail = 73. Colors: Ground color of ~~dorsal~~ back and sides light tan. Dorsal blotches dark brown, darkening posteriorly until last 20 blotches, black. Anterior longitudinal stripes edged with black. Lateral spots, lighter brown, black posteriorly and anteriorly. Belly and ventral side of tail very pale yellowish green (nearly white). Posterior ventral 3rd of snake indistinctly mottled with brown. Iris, tannish orange. Top of head, pale olive; transverse line anterior to eyes dark brown. Other head spots light brown; ~~at~~ ventral sides of head dark brown.

38-260 Same as # 259

38-261 Same as # 259

38-262 Same as # 259.

38-263 Portion of rocky hillside south-facing slope. Center of picture and ^{right} foreground, Yucca baccata in bloom. Opuntia (prickly pear) in center and near top. Joshua and large ^(imm.) bush on horizon. Aspen; 722-6+1. Skink seen amongst rocks.

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38-264 Taken few feet from where #263 taken.
Close up of Prickly pear cactus on left (
and *Opuntia parryi* (?) on right. Composite flowers
in foreground in press; also blue and white Legume
bush. Isapan; f 22 - $\frac{1}{4}$.

38-265 Bank cut by wash containing holes made
in white dirt by *Ammospermophilus*. Joshua
on horizon along with *Salvia cordosa*, *Opuntia*
parryi (?), and bushes in wash in press
Isapan; f 22 - $\frac{1}{8}$.

38-266 View of South-facing rocky hillside
framed by Joshua on left (same tree as #
265). Carcass of Horse in foreground used
to catch Coyote (Johnson - couple days ago) and
to attract Buzzards. Yuccas, cactus, Pinyon,
Junipers on slope. Desert Sparrow now singing
from this slope. Isapan; f 16 - $\frac{1}{10}$.

~~May~~ 30, 1938

4 mi. NE Barnwell, San Bernardino Co., Calif.

38-267- View from divide looking West showing
New York Mts. of Providence Range; framed
by Joshua on left. Vegetation on slope
from where taken includes cactus *Yucca baccata*
Juniper. Isapan; f 16 - $\frac{1}{12}$, K2. Barnwell in foreground.

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38-269. Same as #268 - Agfa #17 filter deep end;
f13 - $\frac{1}{12}$ th.

38-270 View taken from same spot as #268
looking opposite direction, about East
showing part of ^{N.Y.} Catskills Mts. on right.
Occasional Junipers on hills in foreground.
f16 - $\frac{1}{12}$; K₂; Soapan.

38-271 Clump of cactus 14" across. 2 kinds:
Cereus engelmannii (smaller & out.) and
Opuntia (Sp?). Color of Cereus flower = purple.
Those of the other = lemon-yellow with green
stigma. Soapan; f22 - $\frac{1}{10}$ th.

Nevada State Line, 3700 ft., 2½ mi. E Nipton, Calif.

38-272 View of divide of New York Mts.
Soapan; f22 - $\frac{1}{8}$; K₂

38-273 View of Clark Mt. f22 - $\frac{1}{8}$, K₂

Mescal Canyon, 1½ mi. W. Mescal Springs, 5500 ft.,
San Bernardino Co., Calif.

38-274 * View looking up Mescal Canyon. Major
vegetation is: Piñon, Juniper, Joshua, much cactus,
Jucca baccata, Agave. Soapan; f18 - $\frac{1}{10}$.

38-275 Agave (?) $6\frac{1}{2}$ ' tall (green flowering shoot)
in foreground and Blooming Yucca
baccata in background on right.
Isapan; f22- $\frac{1}{5}$.

38-276 View of Clark Range looking North
from ~~the~~ turn-off to Cina from main
Highway, framed by S Joshua on left. 5 P.M.
Isapan; K2; f22- $\frac{1}{4}$ h.

Cedar Congon, 5000 ft., Providence Mts., San
Bernardino Co., Calif.

38-

May 31, 1938

38-277. Forage diggings^(?) of Whip-tailed Lizard
in sandy wash. There are 4 in line. 6"
ruler for comparative size. Isapan; f22- $\frac{1}{8}$ h.
Newspaper used as reflector to lessen
blackness of shadows.

38-278 Same as #277 - Close-up of
one digging near other 4. Ruler
for comparative size. f22- $\frac{1}{8}$

38-279 Same as #278 - Different but
similar burrow - in shade beneath 2 rocks.
Isapan; f22 - 2 sec.

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38-280 Shade habitat of Whip-tailed lizard beneath Lycium in sandy wash. "Fartail" grass at base of bush. Asapan; f 22- $\frac{1}{2}$; exposed $\frac{1}{2}$ between shadow and shade intensity.

~~38~~ 281 Habitat Study - Rocky Hillside, S facing slope containing small Pinyon, Juniper, Prickly Pear, yucca baccata, Joshua, Koringon, Ephedra, Bushes (sp? - in press), Cereus englemanni. Asapan; f 16 - 15th.

38-282. Typical south-facing gulch of running from side of Cedar Canyon. Characteristic flat, sandy wash containing Lycium cooperi and bushes as #281. Rocky Portion contains Prickly Pear and smaller cactus, Joshuas, Junipers, Pinyons, Chipmunks, Sceloporus magister, Rock Wren, Has noticed amongst Rocky Portion. Cnemidophorus, Amphispemaphilus, Has. Desert Sparrow noted on flatter portion. Asapan; f 16 - 15th.

38-283 Penstemon spectabilis(?) on side, rocky hill. One of the preferred foraging plants used by Costa Hummingbirds. General appealing color of flowers, light pink-purple. Asapan; f 16 - 20th. Other bushes in picture:

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Ephedra, Opuntia parryi(?), others in press
Background = Juniper Pinon, Rocky
S. facing slope Cedar Canyon.

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38-284 View looking South-east across Cedar
Canyon framed by Joshua on right. Sandy
flat sloping down to sandy wash
proper at base of hill. Foreground
Vegetation chiefly evenly spaced Lycium
cooperi. Vegetation of wash chiefly
Chrysothamnus. Chiff. hillside vegetation =
Opuntia parryi(?), Opuntia basilaris,
Cereus englemanni, Artemisia tridentata,
Purshia glandulosa, few Junipers, Joshuas.
Inhabitants of wash = ^{flat} Brewer Sparrow,
Desert Sparrow, Whip-t. Tyard, Salvadora
(snake found this A.M. by Rodgers). At
base of hill was where found small
rattlesnake swallowing Perognathus (*May 25).
Cassin Kingbird, W. Kingbird, Gambel Quail,
Scott Oriole also at base of hill. On left
at base of hill is nest site of *Mockingbird,
*Desert Sparrow, *Gray Vireo. Ash-t. Flycatcher
and *Black-chinned Sparrow seen & collected near
top of hill. Isopan; 722-70.



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38-285 View looking down Cedar Canyon
Framed by Joshua on left & Yucca
baccata on bottom. Wash with
Chrysothamnus in foreground runs into
successive Desert Willow groves. Very
tip of *pinnacle showing on horizon, right
side to gap. Wash trapped extensively by
Sahsen. f16 to; K2; Sojan.

38-286 Workings of Thomomys providencialis
showing forage burrows where gopher has
taken stems of plant (sp? - impress along
with other common grasses & plant in
vicinity of holes). "Gopher chooses invaluable
stem plants in preference to valuable
plants (Tillam, etc bunchgrass, etc) for cattle
(6" ruler, for size). Sojan; f22-8th.

38-287 Aelaporus occidentalis bi-seriatus
on rock in wash. Snout to vent = 82.
Tail = 113. Colors: Iris, bronze. Small scales
around eye, brownish-yellow. Side of head, dark
gray; spots of light turquoise anterior to ear and
below angle of jaw. Top of head mottled light
brown and black; spots of pale turquoise. Back, ^{9 sides}
black, dorsal-lateral lines gray. Scale centers
of back and sides, turquoise blue; lateral
lines, lighter turquoise blue. Tail dorsally

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and laterally for proximal $\frac{2}{3}$ covered with black-edged, turquoise blue scales. Distal $\frac{1}{3}$ dorsally & laterally gray-brown, lighter ventrally. First $\frac{1}{3}$ of tail gray ventrally. Anterior surface of humerus and femur black with turquoise spots. Rest of legs and feet gray mottled with some black. Ventral surface of ^{posterior} legs gray; orange in region of femoral pores, light wash of orange posterior to femoral pores & on base foot. Anterior legs, light orange, feet lighter (ventrally). Orange along posterior edge of preanal scales and posterior to vent. Preanal region same as ventral color of as ventral side of legs (gray). This color extends, forming mid ventral line on belly. Contrarily medially a few white scales. Sides of belly indigo, fading to turquoise laterally. Chin gray anteriorly, black posteriorly. Indigo patch on throat. Black separating this from gray on chest. Isopan; f22-tth (side with missing toes)

38-288 Same as #289 (other side)

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38-289 Eumeces (Skink) on sand beside wash
sand in wash. Snout to vent = 83 mm.
Tail = 140 mm. Iris, black. Head (Top), ~~to~~ dark
burnt-orange. Upper and lower labials bright
orange, slightly reddish. ^{Chin}Throat and
gular region salmon fading to pale cream-
green with touches of blue on each scale
to tip of tail (including entire ventral surface
of body, tail and legs.) Back olive
fading to brighter green (less brown) on tail.
Laterally on body and tail dorsal color
fades to ventral color. Burnt orange
on top of head extends as fine mottling
over dorsal olive medially to half of
head and body length. Soles of feet and
toes ventrally olive-brown. Isopod; 22-6th

✓ 38-290 Same as #289

38-291 Crotaphytus collaris on rock in sandy
wash. Snout to vent = 105. Tail = 197.
Colors: Iris yellow, back edge bluish. Top of
head, light yellow-brown, grayish posteriorly.
Sides of head: Lines white, interspaces brown.
Ventral part of head same as sides anteriorly fading
blending into dark gray-blue central area next
to black collar. Collar: one black ring nearly
complete around neck except broken on back.

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posterior black band extends only across
Anterior margin of collar light Cream. Middle
light band orange-cream bordered with
white. 2 dorsal spots in collar, yellowish-
brown. Ground color of back, grayish-
olive fading to grayish-olive posteriorly.
Crossbars of dull brownish-orange. Spots
white. Tail grayish white below, brownish
above, heavily spotted with brown.
Dorsal side of hind legs brown with white
spots and reticulations; yellowish wash of
yellow on anterior side femur + dorsal
side of feet + toes. ^{hind} Legs ventrally, creamish-
white. Femoral pores, tan. Anterior legs:
Dorsal side ^{splashed} brown with white posteriorly
and yellow anteriorly (more yellow). Dorsal
side of feet + toes yellow. Ventral side
of feet creamish-white; ventral side of
legs white; spots of grayish brown. Claws
brown dorsally, tan ventrally. Belly cream-
white medially, neutral gray laterally
white + speckled with black laterally.
2 large, black inguinal patches. Isopari; f22 - 8th.

38-292. Salvadora hexalepis photographed in sand
pit in wash. Snout to vent = 575 Tail = 173 mm.
Colors: Iris, yellow and orange-edged. Top of
head grayish-tan posteriorly grading to tan anteriorly

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Sides of head lighter tan. Head ventrally
tannish white. Dorsal lateral lines extending
from head to vent dark brown, lighter
anteriorly and posteriorly. Vertebral area
grayish, buff; sides more grayish. Belly
flesh color laterally, cream color medially.
Tail, grayish tan dorsally and laterally,
cream ventrally. ~~See~~; Japan; f22 - 5th.

38-293 Same as # 292

38-294 Flat bottom of Cedar Canyon showing spruce
of bushes (chiefly Lyceum). Habitat of
Cnemidophorus, Amnospermophilus, Thomomys,
Desert Sparrow, Brewer Sparrow. Wash in
background. Superpan Press; f22 - 5th.

38-295 View of Reddish Bluff with main
wash of Cedar Canyon in foreground.
Bushes of wash mostly Chrysothamnus

38-296 Close-up of tail track made probably
by Cnemidophorus as went in partially filled
Amnospermophilus hole. 6" ruler for
comparative size. Superpan press; f22 - 15th.

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38-297 Bush and Shadow Habitat of
Coenidaptonus Taken for Tom Rodgers.
Bushes are Lycium. Superpan Press; f22-15th

38-298. Juniper-Pinyon habitat with Opuntia
parryi(?) in foreground, Yucca mohavensis
^{right} in ~~center~~ background and Yucca baccata
at base of Juniper in center. Habitat for
Poorwills (atop ridge). Superpan Press; f22-6th.

June 7, 1938

38-299. Group picture taken at noon at camp
in Cedar Canyon. Left to right: Elmer Aldrich,
Lab Arvey, David Johnson, Mr. Grinnell.
Superpan; f 7-15th.

38-300 - Same as #299

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1938

Daily Comment

* = "see species accounts
or daily account"
* = "see photographic Notes"

2 mi. ENE Cima, 4100 ft., San Bernardino Co., Calif.

May 13, 1938

Left ~~Oakland~~ 6 A.M., May 11 from Oakland, after few stops on Tehachapi pass camped for night about 10 mi. E Mojave. Of interest - was hearing what I am told was Onychomys: A high-pitched squeal of about 4 sec. duration, extremely high and barely audible. At least three individuals were heard and some about as close as 20 ft.; after dark.

Birds seen that evening and next morning before leaving ^{camp}: Sage Sparrow (heard singing nearly everywhere), Sage Thrasher (2 seen), Le Conte Thrasher (2 seen, one singing), Western (?) Kingbird (one seen flying over)

List for Tehachapi pass, from beginning of grade to 6 mi. before reaching Monolith: Golden Eagle (2 adults seen soaring 100 yds apart low over us) Horned Lark (many lower down), Western Meadowlark (2), Linnet (nesting under nearly all culverts), West. Kingbird (several seen), Western Bluebird (sev. seen), Raven (2 seen), Lark Sparrow (one seen), Mourning Dove (2 flocks of about 15), Chim. Swallow (several around barn), Mt. Bluebird (one ♂ seen flying across road)

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Calif. Jay (2 seen), Say Phoebe (2 seen + heard),
Bullock Oriole (2 heard), West. Wood
Pewee (one heard), Plain Titmouse (one
heard) Ash-throated Flycatcher (2 heard
+ one collected, Arvey), Lawrence Goldfinch
(several heard flying over giving
ti-dee ti-dee call), and Horned Owl
(one heard giving 3 syllable call in
Blue Oak Belt).

Snowy Egret - of interest was the
sighting at Baker, San Bernardino Co.,
a Snowy Egret ^{beside} ~~in~~ the muddy stream
near the highway. It allowed an
approach of about 30 yds + with 8x
binoculars could easily see the black
bill, black legs and yellowish feet.
When it flew the characteristic
fast wing beat in itself would
have distinguished it from the larger
American Egret.

Arrived at Kessler Springs about 1 PM.
Birds of ^{seen} interest: English Sparrow (several),
Cowbird (2 collected - Arvey), Bullock Oriole,
Mourning Dove.

—— Itinerary for camp headquarters
afternoon of May 12. - set up camp and
in eve. went in search of Poorwills

List & Censuses: - West. Kingbird (one pair), Sprike

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(2 seen), Sparrow Hawk (1), Desert Sparrow (many), Red-winged Blackbird (2 seen - 1 coll.), Le Conte Thrasher (about 4 heard), Turkey Vulture (one seen), Hummingbird sp? (Arroyo - one seen), Linnet (2 heard), Green-backed (?) Goldfinch (heard several in distance), Parwill (one heard calling several times near camp)

May 13, 1938

Stinney - Stayed nearby camp in morning & afternoon went E. to Railroad track.

Ash-throated Flycatcher - saw and heard about 12. Flycatchers though abundant here feed sometimes differently than expected. Ash-throats were seen many times perching on low bushes feeding on the ground where walking insects seemed more abundant than flying insects in the air.

Western Kingbird (about 11 seen - one nest found). * Desert Sparrow (about 25 seen - many singing)

Turkey Vulture (2 seen - seem to come to watering trough), Scott Oriole (3 seen - 2 ♂♂ & 1 ♀ - feeding on blossoms of cactus), Horned Lark (about 4 seen). Sage Sparrow (Arroyo says found nest - might be Brewer Sparrow), Sage Thrasher (5 seen, 2 singing), Woodpecker (sp? - Johnson one seen), Quail (Gambel?) ² seen & one other heard, Brewer Sparrow (3 seen - probably nest of this species - 3 eggs)

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4.

Mockingbird (3 seen - all singing)

May 14, 1938

Weather today, Clear, hot, with medium west wind prevailing from the west. Spent morning in large, ^{dry} wash E of camp about 2 miles. Went in search to photograph \pm the desert tortoises that Johnson saw $\&$ last night and earlier this morning. Arrived at the hole where they were found, but they were gone 2 hrs. after Johnson left. Combed area thoroughly for ooys around, but couldn't locate. Shot on way a δ Scott Oriole * that Ervey put up. Found a used nest of this gr. almost undoubtedly of this $\&$ a shrike *. On way back found a rattlesnake ~~on~~ in shade of Joshua tree; spent $\frac{1}{2}$ hr. photographing it \pm . Found a nest 5' up in Joshua; is very bulky and probably is a Sage Thrasher. Is a nest of this gr and has had young in it; found feather scales present; Johnson shot a couple fledglings near camp. In the afternoon also went to the dry wash, but much farther east. Near spent some time photographing the nest and eggs of a Brewer Sparrow \pm and a Desert Sparrow \pm as well as habitat & flora photography. At dusk while loading plate holders heard a Coarall calling close by.

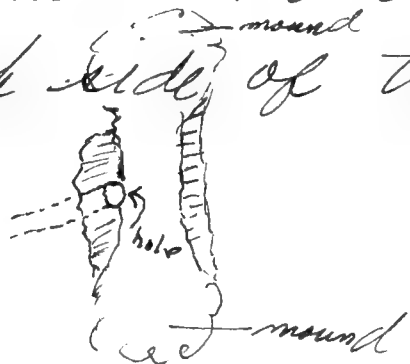
2.

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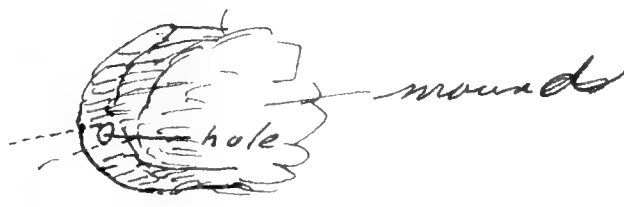
5.

May 15, 1938

Weather partially cloudy, cool, and wind of gale proportions blowing all day from SW. In morning walked W of camp about 2 1/2 mi., N to 1 mi. To shack that was deserted, back to camp. Saw evidences of some large burrowing mammals (see photo catalog) probably Kit fox or Badgers (Dene.). One was quite fresh & thought could see recent foot prints slightly covered with dirt blown by wind. Also saw large diggings in squirrel holes that looked like badger workings or possibly fox or Coyote. There were of two types and might indicate a difference in predator: one with diggings laterally on each side of the squirrel (?) hole (Type A),



Type A.




Type B.

and the other a more flattened digging going directly in after the squirrel burrow. The latter may indicate a badger as it appeared as though digging was done from a low angle. Several examples of each of these types were found. None were intermediate in character. Spent some time watching a Swainson Hawk* about her nest with an eye for determining ways of photographing her. All plans dropped due to gale.

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6.

at the deserted shack observed actions of Say Phoebe* about the nest located inside. Linnets were also around here and suspect earlier in the season have nest here. In shack was much sign of Wood Rat. In afternoon took a short census walking W $1\frac{1}{2}$ mi, E $1\frac{1}{2}$ mi. to Water tank, Back to Camp $\frac{1}{2}$ mi. Weather unsuitable for census as well as photography; Not all the species anticipated were seen. One Say Thrasher's* nest + 4 yng. was found with parent feeding. One thing noticed was tendency for birds to nest in the short, dense Joshua. Although none were found occupied some looked very fresh, but could not be reached because of barricade of yucca leaves in way. Most all looked like the thrasher or Mockingbird type (very bulky of thorny twigs + 1' deep and about 8" wide). As many as 5 such structures were seen in one small Joshua 10' tall. & Wood rat "nests" were found: one a mere double burrow in the wood of a Joshua  base with the burrows running into the ground; the others were located in clumps of Yucca mohavensis either on the ground or up to 4' in ht. In each instance many feces present.

CENSUS SHEET

Nature of route (life zone, fauna, habitats).....

from 1945 to 1947

[illegible]

Weather.....

1m-4,'37

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May 16, 1938

Spent AM photographing W. of camp 2 mi. Went to the Swainson Hawk's nest found eggs still unhatched. Watched for some time a ♂ Cactus Woodpecker digging on Joshua trunks giving notes very similar to Downy. Was also observed* to exit from woody bases of large branches Opuntia. Of note was the seeing of a Barn Swallow courting low over ground and but 50' from me. In Afternoon spent photographing habitats.

May 17, 1938

Saw flock of about 10 Mourning Doves fly over camp in early AM. Went to Cima & Kessler Springs in morning for mail & water. On way back found Costa Hummingbird† Nest + 2 eggs. Spent morning photographing it. Nearby found another rattlesnake (specimen). Inclement weather (thunder & showers in aft.)

May 18, 1938

Took Johnson to Mineral Springs and then went to Las Vegas to have camera repaired.

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May 19, 1938

In forenoon spent time photographing. Heard the Swainson Hawk calling in distance near next location. Only birds of note seen were two Bank Swallows. Had chance to view underparts with binoculars + saw whitish throat, dusky band on breast, and light underparts. Tail was too deeply notched for Rough-winged Swallow. Back dark brown, not iridescent. Packed + left camp for new camp in Cedar Canyon. Stopped on way at C.H. Thomas ranch where he pointed out to us a Sparrow Hawk's nest + 4 eggs and a Screech Owl's nest + 4 yng; Both in Joshua stubs near house + about 30 yds apart. Will photo later. While enroute to new camp saw many Wood Pewees on Joshuas. Passed thru wash land with Sweet Willow. This trees is just beginning to leaf out. One Gambel Quail seen. New camp is rocky in location. In Pinyon + Juniper Assn. mixed with Joshuas.

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9.

Cedar Canyon, 5000 ft., Providence Mts., San Bernardino Co., Calif.

May 20, 1938

- In AM drove to CH Thomas ranch, 5 mi. SE Cima to photograph Sparrow Hawk at nest. Job was difficult and occupied entire morning + part of afternoon. Returned to camp and hiked down Cedar Canyon about 2 mi. List of birds seen or heard today:
- Gray Titmouse (one seen and about 3 heard in Pinon + Juniper of Dead Man Canyon (E.D.M.))
 - Woodhouse Jay (3 seen + heard)
 - Green-backed Goldfinch (4 or 5 seen + heard - heard singing nearly thruout day. Especially active about certain Junipers - one seen carrying nesting material)
 - Lead-colored Bush-Tit - 3 pairs seen in Dead Man's Canyon - Individuals of pair stay close together foraging mostly on outer foliage of Junipers + Pinons.
 - Western Gnatcatcher (about 5 heard on way to Thomas ranch occurring on hillsides with Yucca mohavensis, Joshuas, Barrel + Prickly Pear Cactus. Only one was identified + it was of this species.
 - Costa Hummingbird - 10 heard - more than seen. Hear ♂ giving series-like downer dive. one ♀ seen.

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- Linnet (Is a common bird everywhere - In Joshua Forest & Juniper Pinyon - One ♀ seen feeding 2 yung. out of nest.)
- Cactus Woodpecker (about 3 heard & one seen - often giving note similar to Downy Woodpecker & whinnying call also similar - never heard to give note similar to Nuttall)
- Ash-throated Flycatcher (Seen everywhere but not common; often seen in pairs in either Joshua, Yucca, or Juniper belts)
- Cowbird (2 seen & heard giving whistle-like calls flying over camp)
- Western Tanager (several heard & seen giving notes & I heard singing)
- Prairie Falcon (one perched atop rock near camp - General light color & "black arm pits" noticed).
- Yellow Warbler (one heard singing in dense green bushes near camp amongst Junipers by wash)
- Scott Oriole (many heard sounding like meadowlarks up & down Cedar Canyon, but only 2 seen - seem wary of approach)
- Rock Wren (one heard off on about camp across wash on rocky-cactus slope)
- Mourning Dove (Common - about 25 seen at once at water at Thomas ranch - Heard & seen about camp)

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11.

- Canyon Jay (many seen & mostly heard - so loud can be heard 1 mi. away. Apper to be in flocks some members of which are immatures as yet begging for food & chasing parents. Occasionally heard them giving calls similar to Prairie Falcon (exited at nest))
- Flicker (sp?) - Heard the wick-wick-wick call of an ordinary sounding Red-shafted Flicker - Heard at Thomas ranch in Joshua.
- Arizona Hooded Oriole (one ♂ seen in Chilopsis covered wash in Cedar Canyon giving "wick" type note similar to Brewer Blackbird)
- Cactus Wren (one seen & about 10 old nests in Opuntia - n way to Thomas Ranch)
- Gambel Quail (one heard)
- Desert Sparrow (common in low brush in washes & not seen far up hillsides)
- Red-tailed Hawk (2 seen pair?)
- Mockingbird (about 3 heard in Cedar Canyon - also occasionally seen in Joshua forests)
- Alcalá Warbler (about 5 seen - None singing)
- Brewer Sparrow (several seen in brush of dry washes in Cedar Canyon - seem to be more widely separated than Desert Sparrows) Often heard singing
- Violet-green Swallow (2 circled about me several times not more than 30' high. White nearly meeting

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- over the sump clearly visible
- Empidonax sp? (about 10 seen - none heard giving notes. Some appear to be nearly totally gray beneath and darker with very little yellowish wash; others are bright olivaceous yellow beneath. Most of them perch low in brush on hillsides or in washes. Occasionally one seen perched high on juniper stubs)
 - Wood Pewee (many seen perched low down in brush of washes, and high on juniper & Pinon Stubs, and on J. monacensis. Pewee call or song only heard occasionally. Empidonax & Pewees seen close together)
 - Screech Owl (nest + 4 young in Joshua stub at Thomas ranch - description & photo later)
 - Sparrow Hawk - Nest + 4 eggs + 3 Fledged Eggs in Joshua stub near Owl's nest. Description & photo later.)
 - Western Kingbird (one seen near camp in Cedar Canyon - seem to be restricted more to lower levels)
 - Boonwill (several heard at dusk near camp)
 - Horned Owl (one heard after dark)

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13.

May 21, 1938

Again drove to C.H. Thomas ranch in A.M. - stopped on way, climbed pinnacle located 2 mi. this side ranch. spent nearly entire morning there. Observations of note supplementing yesterday's list are as follows:

- Canyon Wren (one seen carrying feces down from cliffs of pinnacle - heard singing there often)
- White-throated Swift (about 20 seen at once on pinnacle - calling most of the time and 3 copulations in air were observed)
- Pine Siskin (one heard flying North across Cedar Canyon giving high screech like note while flying in undulating fashion - identification was unmistakable)
- Mt. Bluebird (one pair seen - ♂ following ♀ flying across Cedar Canyon)
- Horned Lark (1 seen on flat at summit at head of Cedar Canyon at Bench Mark 5167)
- Shrike (present [nest + 2 young + 1 unhatched egg] at C.H. Thomas ranch and one seen at B.M. 5167)
- Prairie Falcon (one seen hovering over bluff at head of Cedar Canyon)
- Woodhouse Jay (one heard on cactus - yucca hillside near pinnacle; one seen calling atop Pinyon near camp)
- Tolmie Warbler (one seen in Chrysothamnus by roadside in dry wash of Cedar Canyon beside

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- Desert Willow about 3 mi. SW Camp. - one collected near camp amongst Prickly Pear cactus & large green bushes - beside wash at very base of hillside)
- Yellow Warbler (one heard singing 4 times in same place as Tolmie above. - Shot in same place in afternoon)
 - Townsend Warbler (one collected about 50' up slope from where Tolmie & Yellow Warbler taken. This was in the Junipers, however, where the others not seen)
 - Gray Vireo (one heard & was shot at as it was giving its typical Cassin type song. With glasses could see just a light area at base but not distinct and running around the eye as is Cassin - Call (song) ~~is~~ differs from Cassin in that there is less pause between the so-called "question" & "answer" part of its song, thus appears to run more together; also there is sometimes a running down warble at the end which I have never noted in Cassin)
 - Arvey took specimens which appear to me to be Warbling Cassin, and Gray.
 - Green-tailed Towhee (one seen in dense green brush to which it flew from Chrysothamnus of wash. Shot at by Arvey in same place that yellow warbler was taken; Bird was frightened by us & Chestnut Crown

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- patch erected nearly perpendicular)
- Porvill (about 8 heard at once from rocky hillsides about camp. Answered call & shot one)
 - Screak Owl (one heard calling inside Canyon near camp)
 - Golden Eagle (Johnson called my attention to 3 birds sailing over camp early this morning; 2 were Eagles & the other a Turkey Vulture. Distinct angle of Vulture's wings & silver undersurface noticeable. Also saw Golden head on one of the eagles)
 - Crossbills? (saw flock of ^{about 15} birds Center Waxwing size flying & circling over camp early in morning. Giving notes that occur in pairs & may be called "tip-tip", very short & staccato. Wing beat slower than Waxwings. Light was bad & couldn't distinguish colors with glasses - tails seemed longer than Waxwings)
 - Ash-throated Flycatcher (one found building nest inside Juniper stub [photo & description later] Is packing fur of some kind in Woodpecker-like hole)
 - Scot Oriele (Found 2 nests that look typical oriole of light brown fibers in Juniper near camp - 1 Scot Oriele seen to fly & give clucking notes as it left a nest apparently just begun about 15 high in Pinon - other nest in same tree

- and about 30' up)
- Linnet (nest + ? found in Loshus at edge of wash near camp. Nest too high to get to. There are also young out of the nest & being fed by parents in Cedar Canyon)
 - Red-tailed Hawk (found nest + 3 half grown young on ~~an~~ nearly vertical face of pinnacle on West side. Parents very perturbed & the larger of the two made repeated dives at me when I was within 15' of nest, harassing me by about 3 or 4' & then ascending nearly vertically upward, screaming, and repeating process. Other parent was smaller, and very dark brown beneath, but with Red tail. ♀ [larger?] was typical with red tail & lighter underparts & dusky throat; another nest is probably high in Pinyon half way down Cedar Canyon about 3 mi. this side of Pinnacle)
 - Cactus Wren (found many "dummy nests" and one nest + 5 eggs in Opuntia [description & photo later] 3 mi. down canyon)
 - Cliff Swallow (while climbing pinnacle saw to fly by below me & 30' away - saw reddish buff rump & cream-colored patch on forehead; identification unmistakable)
 - Rock Squirrel - one shot at rock pile part way down canyon. Rocks to keep wash away from road - Another seen amongst talus of

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pinnacle base)

- Myiatus subulatus (about 1 doz. frightened out of exfoliating granite near top of Pinnacle. Caught two with hand. They were frightened when I walked on top of the crack. Crack averaged about $\frac{1}{2}$ " wide ~~and~~ opened downward on a 45° angle facing East. When they left they soon dispersed & flew in larger cracks nearby)

May 22, 1938

In afternoon hiked down wash to do some collecting and photographing. Observations of note for this afternoon & morning:

- Cowbird (saw one perched on back of very lean bull in wash - had to frighten bird from back before could shoot)
- Desert Sparrow (photographed parent at nest located in cactus (Opuntia). Of interest that I noted was the snipping off of the points of the thorns of the cactus by the bird. ^{repeatedly} Every time it approached or left it paused to snip off about $\frac{1}{8}$ or $\frac{1}{4}$ " of the thorns. It always left with some difficulty even when in a rush. When disturbed only enough to make it stand on the nest, it had some difficulty in turning around to again sit on eggs. Bird was not wary & would allow an approach of

about 3' before flushing. Return to nest was always quite direct and usually it would pause shortly at lower branches of cactus.

- Gray Vireo (was just about to shoot a vireo singing like Cassin in Bush of wash in side canyon of Cedar Canyon; decided to watch however and it flew into bush about 4' tall & was on nest - will describe & identify bush later.)

May 23, 1938

In A.M. went to Pinnacle where visited couple days ago. Spent some time attempting photo of Cactus Wren at nest, without success. At top of pinnacle found no parent Red-tailed Hawks. In aft. searched for nest & hunted lizards. Observations of note for today:

- Caste Hummingbird (found nest + 1 egg in Opuntia sp. ~~on~~ at foot of pinnacle. ♀ around & unwary. may photograph later)

- Long-tailed Chat (saw one near camp at dusk. Was in shrubby juniper at edge of hillside on shady side. Saw eye ring on yellow breast; no notes)

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May 24, 1938

In AM till 2:00 o'clock went N E of camp and climbed + searched a prominent red bluff with cliff faces about about 100' high. This place in general particularly devoid of animal life especially in raptors that I expected would be there. Saw 3 large, bulky stick nests that might have been used by Red-t. Hawk, Golden Eagle, or Raven. No sign (other than one white-washed ledge) of what might be a Prairie Falcons hangout.

White-throated Swifts were present in the sandstone cliffs; about 12 in number. On way up found fairly large Rattlesnake that was different than those I found at lower levels. Did not buzz till was $1\frac{1}{2}$ ' away and for safety blew with shot gun - Skinned specimen put up by T. Rogers. Rock Wrens were seen carrying food to spot on cliffs; one collected. At base of cliffs were noted Mourning doves and one Green-tailed Towhee shot out of singer. Chipmunks were seen commonly amongst rocks and stumps in canyon + singer. In afternoon spent photographing Gray Vireo on nest in wash. Noticed many young Cotton tails out (are about 6" long). In evening went up side canyon + heard + collected Bufo punctatus near where is trickle of water which maybe permanent.

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20.

May 25, 1938

In AM traversed back + forth ridge SW Camp in search for Poorwill nest; unsuccessful. In afternoon hiked to "upper country" N of camp where could look down on last camp + area. All this area is covered with Pinjon + Juniper, and near ridge overlooking last camp are interspersed Yuccas + much Cactus. Sings of Cattle + burrows found nearly everywhere. Observations of note for today:

- Costa Hummingbird - Found one nest + egg on Pinjon limb (1 1/2" dia.) + shaded from above by limb. Bird about + anxious.
- Poorwill - found no trace of this bird but saw plenty of good nesting sites (fallen logs, tree debris. It is from this slope that Poorwills call out in evenings.
- Cowbird - several seen during day
- Woodhouse Jay - high on N ridge found 4 young out of nest + able to be caught.
- Junco (sp?) - Saw + shot at bird that was definitely a Junco. Looked as though bird fell, but couldn't find it. Was perched about 30 yds away within group of Ephedra + old cactus stems. Was singing: (recorded on the spot) Tsee, tsee, tsee - lldldldld; the first part (tsees) are petulant + almost quatchaw-like. The last part is a trill slightly lower in

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pitch, and whole song lasts about 4 seconds, repeated averaging 10 sec. intervals. Another similar song heard behind me. After shot, saw nor heard them any more. Head was entirely slate gray, bill light, almost white, and with much russet on back. Was not Black-chinned Sparrow, as have heard them & seen them before. Was a Junco of some sort & had no black at base of bill.

May 26, 1938

In AM went down wash of Cedar Canyon & spent photographing Gray Vireo again and others. In afternoon walked farther down wash nearly to Pinnacle close to C.H. Thomas ranch.

Observations of note for today:

- Rattlesnake - With Rodgers in AM. saw small rattler attempting ingesting of Perognathus longimembris in sunshine beside Artemisia bush. Rattles so small that noise made by snake was very high pitched & corresponding higher frequency. Attempted to photograph, but snake regurgitated.
- Cedar Waxwing - saw and attempted to collect a ♂ singing atop Chilopsis tree.
- Cedar Waxwing - saw two and collected one from same Chilopsis as above.

E. Olds
1938

22.

- Warbling Vireo - one heard singing on same hillside as Gray Vireo; Juniper Canyon - yucca slope.
- Gray Vireo * See photographic notes
- Gray Titmouse - Found young out of nest following parents around. Also saw adult Titmouse digging in ant lion pits, and hunting for them beneath ~~on~~ trees on the ground. Adult Titmouse also seen to forage at the bases of yucca baccata.
- Screek Owl - Found nest + 6 young in hole in dead Juniper near camp - later to be collected.

May 27, 1938

Early in AM went with Mr. Kinnell + D. Arvey to Gov't Holes where spent some time looking for Bench Mark and observing ruins. Spent about 1 hr. observing + collecting. Thence went to Rock Springs + was shown historic place where army stationed in eighties. Spent part of afternoon photographing reptiles aided by T. Rogers. Observations + lists for localities visited today:

- Gov't Holes - atop divide and more typically Great Basin Vegetation than where we are camped *;
Few Junipers in Artemisia + Purshia. Occasional outcrops of large granite boulders.
- Cissal Thrasher (one seen and shot from fence post)

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- First seen in dense Artemisia; later proved to be immature (bill shorter, loose feathers)
- Woodhouse Jay (2 heard and seen in tall Artemisia near to Junipers)
 - Least Sparrow (most common bird at Salt Holes - in pairs - saw about 12)
 - Ash-throated Flycatcher (2 seen in Juniper)
 - Western Kingbird (2 seen in Juniper)
 - Scott Oriole (one heard singing from top Juniper)
 - Horned Lark (2 heard passing over - open stretches in Artemisia nearby)
 - Cowbird (two seen in barnyard - one found in water tank, Diway)
 - Western Gnatcatcher (one pair seen in dense Artemisia)
 - Western Tanager (one ♀ seen to fly from dense Artemisia to top of fence post)
 - Mourning Dove (2 or 3 pers. staying about watering troughs in yard)
 - Shrike (nest + one egg)
 - Mammals seen: Sack Rabbit 6, Cottontail 5, Onychomys - mophilus - more common near rock Outcrops,
 - Reptiles seen - Cnemidophorus common, Uta common

May 28, 1938

In AM till 4:30 P.M. spent in "high country" with J. Arvey N. of camp in Mid Hills of Providence range. Spent time taking censuses, photographing habitats Brewer Sparrow ♀, and attempting to collect.

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24.

Larks seen before and Black-chinned Sparrows. Country midway between camp & summit of Midhills becomes very rocky (large, brown granite outcrops) mixed with large Pinyon & Juniper. In the washes occurs Chrysothamnus and Artemisia, and some ^{rocky} slopes contain Yucca baccata, cactus and Artemisia alone. In these slopes is where the Black-chinned Sparrow was found \neq . At higher altitudes (about 6000) near the summit we also found the sparrows in a similar habitat. The birds seemed to be travelling in pairs and were difficult to collect. When flushed the birds may fly 500 yds away in a direct line or circle about in an ^{approx} equally diameter. Singing posts were noted to be both high and low, frequently from tops of occasional Pinyons or Junipers, and Artemisia. I found one nest \neq in Artemisia. One of the parents was less wary than the other but would approach only within 2' of nest when cornered there. Song starts out high pitched with about 2 notes nearly on same level of scale & gradually descending, notes getting faster & almost vibratory.

Census for today: 24 species, 169 individuals, 8½ hrs.

Red-throated Flycatcher 4 -

Western Gnatcatcher 8 - in trees as well as ~~seen~~ ^{fresh}.

Green-backed Goldfinch 4 - seen & heard near spring by camp

Warbler (species?) - 1 - probably Pileolated (glance)

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Innet 10 (In all habitats)

Western Tanager 2 - (one singing, one ♀ (not pr.))

Mourning Dove 13 - (all in pairs)

Gray Titmouse 1 (Do they stay lower down?)

Pinyon Jay 25 (seen in flocks up to 10, singly.)

Woodhouse Jay 10 (seen or heard singly - or family of 3 out of nest)

Turkey Vulture 5 (most seen sailing on rising air currents of summit).

Costa Hummingbird 2

Black-chinned Sparrow 19 (one nest + 3 eggs coll., mostly in pairs)

Scott Oriole 5 (heard singing near summit)

Gray Vireo 4 (heard singing in Pinyon-Juniper Assoc. and once from brushy hillside - coll.)

Desert Sparrow 12 (seen & heard in pairs, occupying identical habitat with Black-chinned Sparrows. May not have appeared so numerous, because aren't singing so much or as loud as Black-c. Sparrow; can hear Black-chinned Sparrow 2 mi.)

Bewick Wren 10 (several heard singing, coll.; one young out of nest coll., away)

Rock Wren 7 (2 on cliffs of summit, & rest in rock Outcrops at about 5500).

Red-tailed Hawk 2 (sailing together when left camp)

Brewer Sparrow 1+ (one nest + 4 eggs found, photo - can't see why didn't see more - none are singing now & are more reclusive than other sparrows)

E. Aldrich
1938

26.

Spotted Towhee 2 (2 seen ^{at base of} summit, one singing atop thorny, green bush by rock Outcrop; other in similar situation)

Lead-colored Bush-Tit 16 (Either seen ^{simply} in pairs, or in families [yng. just out of nest])

Empidonax (sp?) 1

Wood Pewee 2 (one calling)

May 29, 1938

Spent most A.M. in wash of Cedar Canyon and Branch Canyon where road leads to Essex. In early afternoon photographed reptiles aided by T. Rodgers. In late afternoon went with Rodgers to reddish Butte E. camp. Observations of note:

- Cassin Kingbird & Prairie Falcon (In A.M. saw two Cassin Kingbirds, one being chased by a Prairie Falcon and the other Cassin chasing the Prairie Falcon. Kingbirds were uttering different note than ordinary and more common Western; may be written as cree-dee, accent on both syllables and very closely run together. This series given in rapid sequence. Chase didn't last long + Falcon continued low over wash down canyon. Light-tipped tail, no white on outer edge of ^{outer} rectrices was easily seen).
- Gray Titmouse (Johnson showed me nest in single bran unbranched, dead Joshua stub in rocky habitat near Junipers on side Canyon of ^{photo later} Cedar Canyon. Parent carrying food to nest hole)

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- Black-chinned Sparrow (3 heard singing & one collected on side-hill [photo #284] of Cedar Canyon. Artemisia tridentata seems almost to be requisite for this species)
- Horned Owl (Flushed one from cliffs in canyon near Kiddish butte. Investigated all suitable ledges without finding nest. After 5 hr. owl again seen flying farther up canyon.)

May 30, 1938

In AM drove with Grinnell & Johnson to Tanfair Valley, purdy, Swanpak, to main highway & stayed part of afternoon at Mineral Springs where took list of birds. Returned by way of Cina. Spent some time helping to plot lower limit of Pinon-Juniper on surrounding Mt. ranges. List for Mineral Canyon:

- Desert Sparrow (seen carrying nesting material)
- Green-t. Towhee (one seen in brushy stream bottom)
- Warbling Vireo (one shot - not singing)
- Warbling Vireo Black-headed Grosbeak (one ♂ seen)
- Linnet (nearly everywhere & apparently nesting in potholes in cliffs - seen carrying food)
- Costa Hummingbird (several seen feeding on red & purple penstemon, power diving)
- Western Gnatcatcher (3 pairs seen & heard giving notes, not singing)

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- Ash-throated Flycatcher (2 heard)
- Violet-green Swallow (2 seen flying about cliffs)
- White-throated Swift (one seen emerging from cliff crack)
- Red-tailed Hawk (one adult seen - one nest + at least 2 young high on E.-facing cliff. Young are as yet downy white - with juvenal plumage on wings.
- Black-throated Gray Warbler (one very buzzy warbler song heard from brushy hillside.)
- Rock Wren (3 recorded - one seen carrying feces across canyon)
- Black-chinned Sparrow (one heard ^{+ seen} singing on brush (sp?) on sides of rocky cliffs I have never seen this species in this type of area)
- Western Tanager (2 ♀s seen in Semipers in bottom of canyon)
- Tolmie Warbler (one seen giving notes)

May 31, 1938

In A.M. photographed* near camp and down Cedar Canyon. Afternoon, also photographed, mostly reptiles.

Brewer Sparrow (Mr. Grinnell flushed parent from nest ^{+ 4 eggs} low down in bush. Nesting period must extend over some period, because have observed young out of nest several days ago.

Edwards
1938

29.

- Black-chinned Sparrow (Heard & saw 3 birds on E. side Cedar Canyon. These birds must be coming in because haven't heard their song until recently. Perhaps singing is more intense thus making them more obvious. *See species notes)

June 1 & 2nd 1938

Drove back to Berkeley in 2 days with Dr. Grinnell, stopping over at Hotel Tulare. Spent morning of 1st in Valley Hills with car trouble.

Aldrich
1938

[*Buteo swainsoni*]

1.

Swainson Hawk

2 mi. NNE Cima, 4100 ft., San Bernardino Co., Calif

May 15, 1938

This A.M. went $\frac{1}{2}$ mi. W camp to nest of this species, located near top of Joshua 20' tall. Nest about 3' wide at top and as deep. Lined with Joshua bark fibers. 2 eggs, white, slightly rough seemed quite far incubated. Bird flushed at my approach when I was 30 yds. away, flew low over trees, circled quietly around me and then sailed out of sight low over Joshuas. Waited 40 yds away partially concealed beneath Joshua & waited for her return. Waited 5 hr & noticed her perching on a Joshua 50 yds beyond nest tree. Stayed there for 10 min. constantly moving head from front position to direction of nest. While perched a pair (?) of ^{west.} Kingbirds began attacking it and then a couple of shrikes. This only caused her (?) to move head more rapidly. She then flew to left of nest tree 30 yds chased by a shrike (paid no attention). Perched another 5 min., always looking towards nest tree. Then took off as usual with about 4 flaps sailed in the strong wind over me displaying the

2,
light throat and the broad deep buff wash
across breast and distribution of white
beneath the relatively thin (compared to Red-tail)
cut wings. She again lit on same tree
50 yds beyond nest tree on dead remains
of still-attached Joshua blossom. Have
two calls about 2 sec duration and 30 sec
apart. Sound like Red-tail call but
high pitched + with less deflection and
end. With cold wind blowing I left
and allowed her to come back.

[~~Archilochus alexandri~~]

[*Spiroella atrogularis*]

Black-chinned Sparrow

Cedar Canyon, 5000 ft., Providence Mts., San Bernardino Co., Calif.

May 30, 1938

10:30 AM Have been listening to adult singing for past 15 minutes. 1st heard when singing atop Artemisia tridentata 3½' tall, facing sun throws head back till bill almost vertical & opens mouth wide with each note. Sang about 5 min averaging about one song per 10 seconds. Each one lasting 2½ seconds. After 1st 5 min. shifted position 10 yds E on the same Artemisia side hill, sang for 4 minutes, pausing at first investigating inside of the Ephedra bush, then flying low and undulating (tail appears same length of body) to another Artemisia, singing for 3 minutes; stopped singing disappeared few ft. away in scrubby. After 2 min. heard singing 35 yds below me in wash in Chrysothamnus, & as far from first singing post. Song: twee, twee, twee, twee, twee-twee-dle-dle-dle. Accent on the first note, gaining speed, running into till only slightly lower than first note. After singing in wash resumed nearly same position on side hill (3rd singing post), sang for about 7 min. & still going. Song is slightly ventriloqual. Can be heard for great distance, yet when close may seem

very far away. So far has been singing from
4 posts (bushes), all with a diameter of 40 yds. Desert
sparrow pair singing nearby, no effect.

10:58 - has now moved 35 yds farther east
out of usual diameter & singing
somewhere within wash (Brewer Sparrow
singing nearby).

11:00 - has now moved about 50 yds farther
yet & singing with average space between
songs same

11:02 - has gone even farther yet up wash
& is somewhere 150 yds E. of me but
singing

11:03 - Has returned to within 5 yds of usual
dia & sang 2 times atop *Artemisia*. Took
10 yd flight toward wash low over ground
let in middle of bush, hopped by
steps to top, near top sang once, descended
& think flew to another bush, sang only
1st part of song as tho interrupted, paused
about 10 sec. sang once - flew to top of
Yucca, top-most twig sang 6 times, swinging
head from side to side, descended into bush,
not heard singing. Another heard far in
distance on same side hill down Canyon. All these
observations taking place at base of hillside
(photo #284) seems to be only one in this vicinity. One
heard singing 3 min. atop Joshua 150 yds across canyon. Same one?

E. Aldrich
1938

[*Calypte costae*]

Costa Hummingbird

1 mi. S.W. Kessler Springs, 4500 ft., San Bernardino Co., Calif.

May 17, 1938

Stopped to photograph* cactus & found Costa nest + 2 eggs about 8' up, placed atop dead remains of Joshua blossom. Nest same color as dead blossom & resembled same very much in appearance. ♀ only seen and she wasn't at all wary. When I approached she flushed when I was about 3' away. Flushing distance became shorter & shorter till I could put my hand slowly within 4" before she would flush. When she did flush, and if I should put my hand on the nest she would peck at my finger. Bill on dorsal side covered to base with yellow pollen. Nest shaded by green Joshua leaves 5" above nest. Favorite perches are uppermost tips of Yucca baccata where she may perch 5 minutes, scratching & preening. Notes given by ♀ Costa are nothing like Allen, Rufous, or Anna. Note is higher pitched, always solitary, and ~~even~~ much more musical and metallic, not staccato as in above mentioned species. Food plants about are Paint Brush, Y. baccata blossoms, and some other bright orange species probably a mallow. When disturbed ♀ would flush about 5 times (flushed

E. Aldrich
1938

Costa Hummer — 2

by slightly moving hand 3' away) and then
retire about 5 minutes to yucca perches.
Could always tell when she was returning
by the "tink" note. Sounded more like
Least Sparrow note. In flight seems to
make less hum than above mentioned
species. Always would face camera &
so broadside shots were difficult.
Nest constructed of bits of ^{gray} scales of portions
of Joshua petals (dried), fine bits of fibers
(probably decayed Joshua leaves), several
large feathers on the rim & interior, and
all densely held together by spider webs.
Reminds of Joshua blossom on which
nest placed, had some ~~more~~ extraneous
spider webs over it probably misplaced
by bird. Approach to nest always
made indirectly by flitting "thru" Joshua
limbs 10' away before landing. Notes, solitary,
when approaching given about average every
4 seconds (may not give any). In flight I did
much flitting of tail showing large white areas.

Cactus Woodpecker

2 Mi. NNE Cima, 4100 ft., San Bernardino Co., Calif.

May 16, 1938

Observed two Cactus Woodpeckers today. One was watched about $\frac{1}{2}$ hr. Spent most of that time digging in Joshua Tree. Dug on live as well as dead limbs & repeated constantly. May have been because it was aware of my presence. Occasionally would dig on a certain spot & then fly to a limb another side of tree & peck a few times, then come back to original place. All digging was done on that part of Joshua without leaves. Occasionally would give note very similar to downy, but seemingly not so emphatic or metallic; was slightly lower pitched to & probably approximates more nearly the hairy note. Probably was the ♂ as entire back part of head was crimson red. Examined workings & found small torn places not over $\frac{3}{8}$ " deep.

Later on observed one to fly from Joshua (giving note in flight) to base of 4' high branched Opuntia parryi (?). Flew to base of cactus within 6" of ground where was woody & lacked thorns. Woodpecker space was limited and so revolved around instead of up & down.

After probing on this one, flew to another 20 yds. away & did same thing. passed up the smaller ones in between that had no woody base but was entirely covered with thorns. Occasionally gave "cheek" note. (Downy or Hairy note & "cheek") Examined two Kings & found bird had probed in the spaces between the woody vascular bundles & not in the bark portion.

Cactus Woodpeckers in this region are not common. I have found but one hole in Sashua & think may have been made by woodpecker. In a day of continual walking in Sashua forest one might see or hear 3 to 6 individuals.

E. Aldrich
1938

[Sayornis saya]

11

Say Phoebe

2 mi. NNE Cima, 4100 ft., San Bernardino Co., Calif.

May 15, 1938

This morning observed actions of pair of this species about a nest + 4 yug inside a deserted shack⁺ (see photographic notes for description and measurements). Birds seemed very smart as I couldn't hide from them any place in the shack. They had Joshua perches about so they could see any place within thru the windows. When perch wasn't near they would hover beside a window and look inside constantly giving the plaintive solitary call. One of the individuals seemed less solicitous than the other. Yug. are about 5 grown with body feathers out of sheaths 5. Attempted to photo bird on typical perch nearby but one bird would only attempt to perch on the release thread.

[*Toxostoma bendirei*]

Oreoscoptes montanus

Sage Thrasher

2 mi. NNE Lima, 4100 ft., San Bernardino, Cal.

May 15, 1938

Found nest of Sage Thrasher in Opuntia
ranunciosa on edge of clearing in
Joshua forest. Both parents about with
food in bill. Nest contains 4 young
about ready to leave; nest measurements
will be taken later. Parents come
as close as 50 ft. and give chucking
notes and a solitary note similar
to that of West. Bluebird, but with
slightly longer duration and slightly
quavering. Yng. show no reaction to parents
notes. Will photograph later

May 16, 1938

Went to nest found yesterday and all
yng. still in nest. Came back and 2 hrs. later
found 2 yng. in nest; Others were near about
and adults excited. Another left at my
approach and got away. Last one was the
smallest and nearly dead probably from lack
of food (specimen). See photographic notes⁺ for
measurements.

E. Aldrich
1938

[*Lanius ludovicianus*]

Shrike

2 mi. NNE Cina, 4100 ft., San Bernardino Co., Calif.

May 14, 1938

10:40 AM. Was attracted by the singing
buggy type of song characteristic of
shrikes and noticed a shrike perched
on the topmost portion of a Joshua tree
on the dried remains of a terminal blossom.
Bird seemed somewhat perturbed, but
wouldn't allow an approach closer
than 50 yds. Noticed an especially
dense but short Joshua and looked
inside, saw about 4 different nests
of two different kinds, and only
one looked fresh. With some difficulty
reached the new one and found it
empty. Pulled out some of the lining
& found abundant feather scales
indicating fledged birds. Nest seemed
of right consistency for shrike. Had
small bulky outer layer of sticks,
dried twigs gradually reducing in size
to the lining consisting of bits of
cow hair, rabbit fur, wool, paper, etc.
Am certain wasn't Kingbird, or Ash-
throated Flycatcher. Didn't seem bulky
enough for thrasher. Soon saw

E. Aldrich
1938

Shrike - 2

another shrike and shot it. Shrikes
in this region aren't very common
and seem to be restricted to a
definite area more so than Scott
Orioles, Kingbirds, Ash-t. Thrashers.
Occasionally these will fly over camp
but never saw a shrike. If you
go to an area where seen shrikes before,
regardless of nesting(?), will ~~no~~ be there.

E. Alarick
1938

[*Icterus parisorum*]

6

Scott Oriole

2 mi. NNE Cima, 4100 ft., San Bernardino Co., Calif.

May 14, 1938

10:30 collected a male from top of Joshua tree (skinned by Arvey). Was first attracted by its song resembling a meadowlark with less guttural quality and of shorter duration; Wasn't as loud and lacked the smoothness. Had difficulty in shooting it as wouldn't allow close approach and even when not disturbed would stay only short time in one tree & then fly perhaps 50 or 60 yds to another. Its plumage was distinctly adult male in character, but seemed quite worn. Saw three others (2♂, 1♀) flying and stopping in same manner as above. All three were never farther apart than one Joshua (about 20 yds). One ♀ was seen to alight on top of low, large group of ^{sp?}cacti (size = to woodruff) (see photographic notes # 38-100) and apparently pick 5 times something from the center of a large flower 2 or 3" in dia. Many insects are attracted by these evenly spaced cacti, so perhaps is attraction. They were heard to give some chirping notes

E. H. Wick
1938

Scott Oriole — 2

resembling those given by an English
sparrow and a note similar to the
long ääääK of a magpie. Underparts
of Sotolia limbs were searched for
all day but no nests seen.

∴ The Scott Oriole in this region
is not very common and walking about
all day may net glances at only
one to three individuals.

E. Aldrich
1938

[*Amphispiza b. deserticola*]

1.

Desert Sparrow

2 mi. NNE Cima, 4100ft., San Bernardino Co., Calif

May 13, 1938

9:15 - Noticed bird carrying nesting material and went to brush (sp.?) where I last seen. found a nest (description later) about $\frac{2}{3}$ completed. Can hear other Desert Sparrows singing about 40 yds away. One 15' atop dead Joshua singing: tree-tree-tuddledle the 2nd note higher than first & song ending in more or less warbling trill. Am now sitting behind bush 20 yds away from nest. Birds seem to have left area since my entrance. Have seen lately near camp one bird chase another, then immediately fly atop bush or tree and sing. This may indicate a territory. Nest Description.

Ht. Bush --- 2'4"

" Rim of nest --- 1'4"

Outside dia. of nest including all twigs --- 16 cm.

" " " " " " rt Ls --- 12 cm

Inside depth --- 9 cm

" dia. (ground) --- 5 cm

Outside depth --- 9 cm.

Nest in center of bush, made entirely of dry grass and the interior is of shredded grass. Nest interior still rough.

E. Aldrich
1938

Desert Sparrow - 2

May 14, 1938

11:30 AM. - Saw 2 Desert Sparrows copulating. ♀ perched atop branch of bush about 5' thick. She had just flown there, was followed by ♂ who mounted for 4 sec., left. ♀ fluttered wings, flew immediately afterwards and lit on ground and fluttered wings. ♂ 3 ft. away paid no attention. Fast high pitched chirping notes given throat process.

May 15, 1938

Season of Desert Sparrows apparently is varied amongst individuals. 2 days ago Arvey found nest that had 3 young 2 grown (Eaten by Red Racer). The two nests that I am watching aren't as yet completed. Both are within 30 yds. of camp and as far apart. Nests have lining nearly completed. Males(?) are still singing atop bushes or Yuccas. When taking census in afternoon found this species to be the most abundant species with Linnet 2nd. All (nearly) ~~were~~ Desert Sparrows were in pairs with individuals being never farther apart than 10 yds. A few of the single individuals may have had mates farther distant, however.

E Aldrich
1938

Desert Sparrow — 3

May 17, 1938

Found nest + 1 egg near camp. Birds not around

May 18, 1938

Nest found May 17 now has 3 eggs. Nest found
May 13 now has two eggs.

